

JOURNAL CLUB

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BRINGING CLINICIANS TOGETHER TO DISCUSS CURRENT DRUG THERAPY

January 2023

The following succinct analysis appeared in *Pharmacist's Letter*. Based on vol. 36. No. 10

INFLUENZA

When should an antiviral be used to treat or prevent influenza?

Continue to limit antivirals to patients most likely to benefit.

And keep in mind, antiviral flu meds aren't effective against SARS-CoV-2...even though many COVID-19 and flu symptoms overlap.

Ireatment. Don't feel compelled to recommend an antiviral to treat flu in most healthy patients. Advise fluids, rest, etc.

Oseltamivir (*Tamiflu*) or baloxavir (*Xofluza*) only reduces flu symptoms by about a day...if started within 48 hours of symptom onset.

For now, stick with oseltamivir for hospitalized patients... severely ill patients (pneumonia, asthma or COPD exacerbation, etc)... and most high-risk outpatients (immunosuppressed, pregnant, etc).

It's okay to consider baloxavir for nonsevere flu in some outpatients with risks...such as diabetes, heart disease, or age over 65

Recent data suggest baloxavir works as well as oseltamivir in these cases. Plus it's one dose and causes less GI upset than oseltamivir.

But baloxavir costs about \$150 and may not be covered by payers...oseltamivir is \$75 for 5 days.

And baloxavir isn't approved for under age 12...but may be soon.

If patients get baloxavir, tell them to avoid taking it with cations (calcium, zinc, etc)...these may reduce baloxavir's efficacy.

<u>Prevention</u>. Generally advise saving antiviral prophylaxis for institutional outbreaks...or for patients who are immunosuppressed.

Be aware, new evidence suggests that single-dose baloxavir decreases risk of contracting influenza after a household exposure... preventing 1 case for every 9 contacts treated versus placebo.

Don't be surprised if baloxavir is approved for prevention soon.

Oseltamivir is also effective...and has a longer track record.

But don't routinely suggest any antiviral for post-exposure prophylaxis...to limit resistance, shortages, and side effects.

Emphasize flu vaccination, handwashing, staying home if sick, etc.

Get answers about the role of other antivirals (Relenza, etc) for flu treatment and prevention in our chart, Antivirals for Influenza.

(For more on this topic, see Clinical Resource #361004 at PharmacistsLetter.com.)

Ison MG, Portsmouth S, Yoshida Y, et al. Early treatment with baloxavir marboxil in high-risk adolescent and adult outpatients with uncomplicated influenza (CAPSTONE-2): a randomised, placebo-controlled, phase 3 trial. Lancet Infect Dis 2020 Jun 8 doi: 10.1016/S1473-3099(20)30004-9.





DISCUSSION OUESTIONS

| OVERVIEW OF CURRENT THERAPY |
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| 1. What is known about baloxavir or oseltamivir to treat outpatients with influenza? |
| ANALYSIS OF NEW GUIDELINE |
| 2. What type of study was this? How were the patients selected for inclusion? |
| 3. How were the study groups defined? |
| 4. How were the outcomes evaluated? |





| 5. | What were the outcomes of this trial? |
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| 6. | . What were the strengths and weaknesses of this trial? |
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| 7. | . Were the results expressed in terms we care about and can use? |
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| НС | DW SHOULD THE NEW FINDINGS CHANGE CURRENT THERAPY? |
| 8. | Do the results change your practice? How? |
| | |

APPLY THE NEW FINDINGS TO THE FOLLOWING CASE

AP is a 31-year-old otherwise healthy female who calls your office for guidance after she developed acute onset malaise and myalgias while at work. She left work immediately,



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and once she got home, took her temperature which read 100.4°F. She has no known sick contacts. Her employer will not allow her back to work without a letter from your office clearing her to return to work.

9. What are the similarities and differences between signs and symptoms of influenza and COVID-19?

Due to the overlapping symptoms between influenza and COVID-19, your office is referring all patients with respiratory symptoms and/or concern for COVID to their drive-through testing facility to get tested for both influenza and COVID-19. The patient has a rapid flu swab done at the drive-through testing facility that is positive for influenza A. The testing facility contacts your office to report the results and you call the patient to discuss. The patient is grateful that she does not have COVID and is interested in treatment for influenza.

10. Is antiviral treatment indicated for AP? If indicated, what are antiviral options?

You recommend rest, pushing fluids, and OTC analgesics if needed for AP. You discuss that antivirals are only shown to shorten symptoms of influenza by about a day, and are generally not indicated for otherwise healthy patients.

AP agrees that a one-day improvement in symptoms isn't enough benefit to warrant treatment in her case. However, AP wonders how long she should expect to be away from work..

11. When can AP return to work?

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REFERENCES

Centers for Disease Control and Prevention. Influenza antiviral medications: summary for clinicians. https://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm. (Accessed September 16, 2020).

Dobson J, Whitley RJ, Pocock S, Monto AS. Oseltamivir treatment for influenza in adults: a meta-analysis of randomised controlled trials. Lancet 2015;385:1729-37.

Hayden FG, Sugaya N, Hirotsu N, et al. Baloxavir marboxil for uncomplicated influenza in adults and adolescents. N Engl J Med 2018;379:913-23.

Ison MG, Portsmouth S, Yoshida Y, et al. Early treatment with baloxavir marboxil in high-risk adolescent and adult outpatients with uncomplicated influenza (CAPSTONE-2): a randomised, placebo-controlled, phase 3 trial. Lancet Infect Dis 2020 Jun 8, doi: 10.1016/S1473-3099(20)30004-9.

Mishin VP, Patel MC, Chesnokov A, et al. Susceptibility of influenza A, B, C, and D viruses to baloxavir. Emerg Infect Dis 2019;25:1969-72.

Omoto S, Speranzini V, Hashimoto T, et al. Characterization of influenza virus variants induced by treatment with the endonuclease inhibitor baloxavir marboxil. Sci Rep 2018;8:9633.

Uyeki TM, Bernstein HH, Bradley JS, et al. Clinical practice guidelines by the Infectious Diseases Society of America: 2018 update on diagnosis, treatment, chemoprophylaxis, and institutional outbreak management of seasonal influenza. Clin Infect Dis 2019;68:895-902.

Venkatesan S, Myles PR, Leonardi-Bee J, et al. Impact of outpatient neuraminidase inhibitor treatment in patients infected with influenza A(H1N1)pdm09 at high risk of hospitalization: an individual participant data metaanalysis. Clin Infect Dis 2017;64:1328-34.

Additional Pharmacist's Letter Resources available at PharmacistsLetter.com

Chart, Antivirals for Influenza. Pharmacist's Letter/Prescriber's Letter. October 2020.

Chart, Flu Vaccines for 2020-21. Pharmacist's Letter/Prescriber's Letter. August 2020.

Chart, Supplements for Colds and Flu in Adults. Pharmacist's Letter/Prescriber's Letter. January 2020.

Chart, COVID-19 and Pharmacotherapy. Pharmacist's Letter/Prescriber's Letter. September 2020.

Chart, COVID-19 Testing FAQs. Pharmacist's Letter/Prescriber's Letter. October 2020.

Chart, FAQs: Non-Medical Masks and Face Coverings. Pharmacist's Letter/Prescriber's Letter. September 2020.

Chart, Treatment of Community-Acquired Pneumonia in Adults. Pharmacist's Letter/Prescriber's Letter. December 2019.

Chart, Vaccinating Immunocompromised Patients. Pharmacist's Letter/Prescriber's Letter. December 2019.

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