EBM急診

2012.2.20

Background

- Chief complaint: fever for three days
- Present Illness: A 24-year-old female visited our emergency department because of fever up to 39^{O}C. Fever had last for 3 days and She has ever visited local clinic where upper respiratory infection was told. Cough, rhinorrhea and sore throat were also noted. She also suffered general myalgia.

Background

- Lab and image
  - CXR: nothing particular
  - WBC 5300/ul
  - C-reactive protein: 0.5 mg/L
  - Influ A+B: influ B(+)

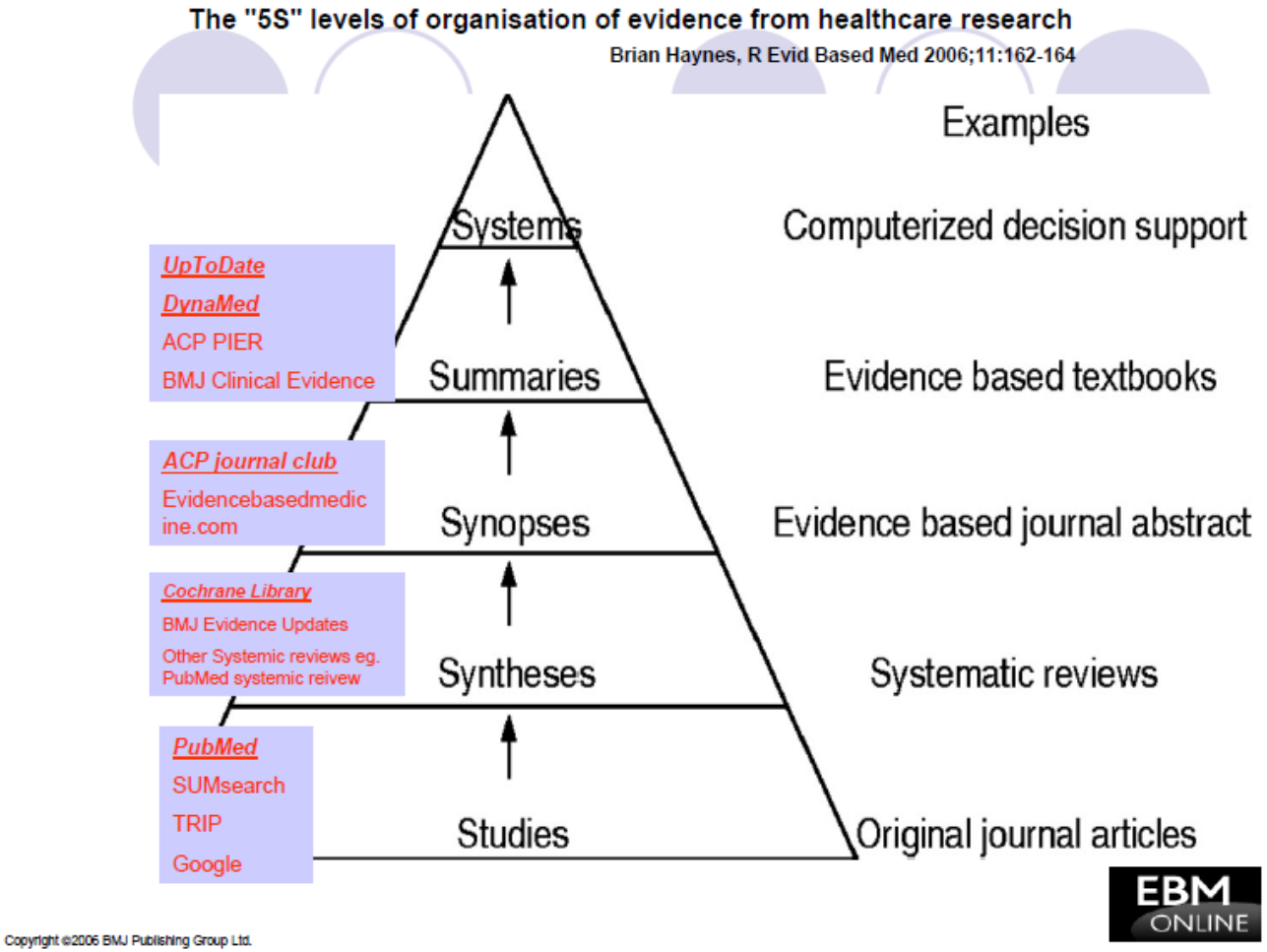
- Influenza B was diagnosed

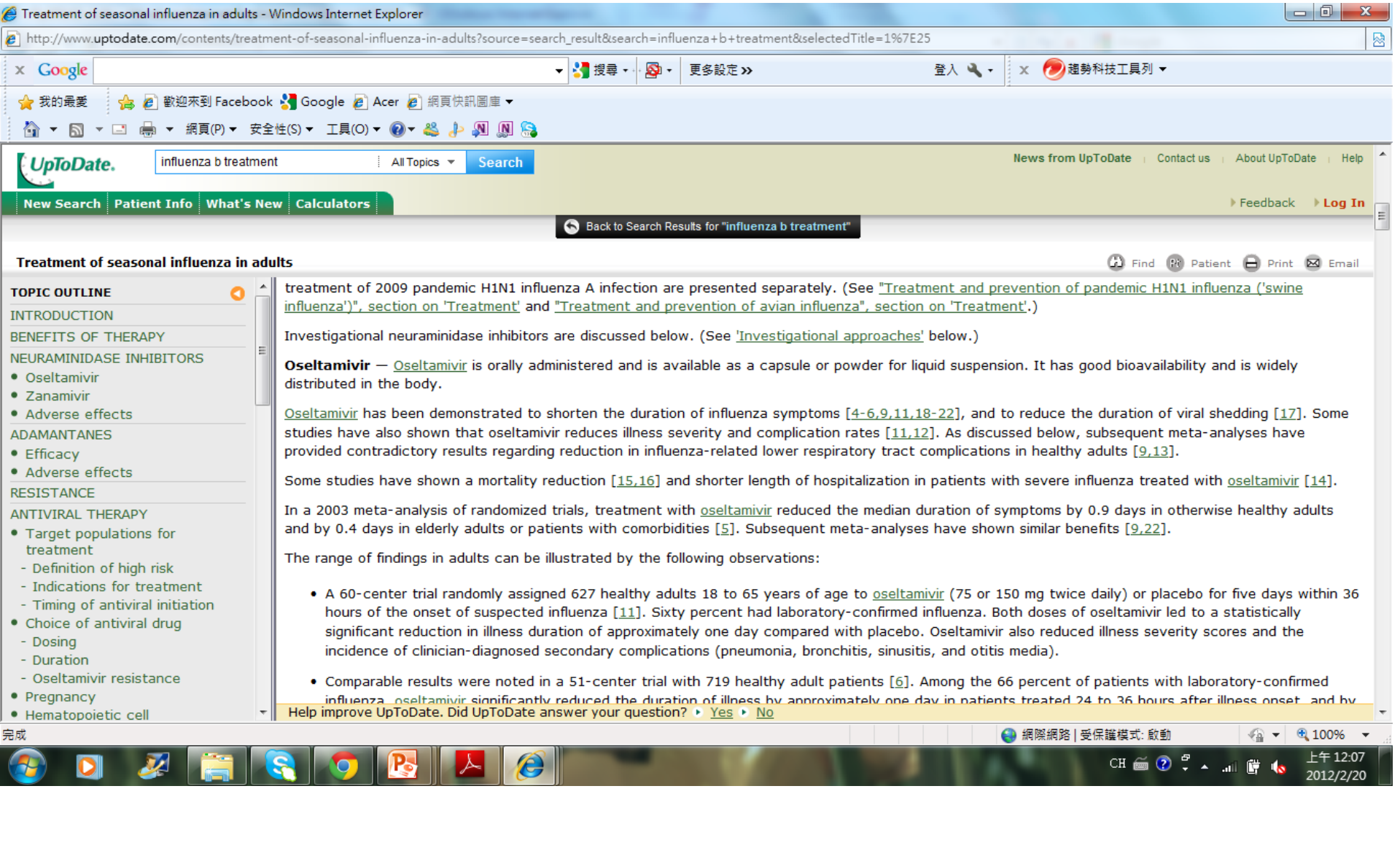
- 根據衛生署克流感藥物使用建議，合乎公費使用(發燒大於48小時)
- 給予的好處爲何，證據強度如何

提出可回答的臨床問題(Asking)

- P: patient of influenze B
- I: Tamiflu(Oseltamivir) use
- C: symptoms treatment, placebo
- O: prognosis

搜尋最有用的資料(Acquire)




Treatment of seasonal influenza in adults - Windows Internet Explorer
http://www.uptodate.com/contents/treatment-of-seasonal-influenza-in-adults?source=search_result&search=influenza+b+treatment&selectedTitle=1%7E25
Google
搜尋
更多設定 »
登入
趨勢科技工具列
我的最愛
歡迎來到 Facebook
Google
Acer
網頁快訊圖庫
網頁(P)
安全性(S)
工具(O)
UpToDate.
influenza b treatment
All Topics
Search
News from UpToDate
Contact us
About UpToDate
Help
New Search
Patient Info
What's New
Calculators
Feedback
Log In
Back to Search Results for "influenza b treatment"
Treatment of seasonal influenza in adults
Find
Patient
Print
Email
TOPIC OUTLINE
INTRODUCTION
BENEFITS OF THERAPY
NEURAMINIDASE INHIBITORS
• Oseltamivir
• Zanamivir
• Adverse effects
ADAMANTANES
• Efficacy
• Adverse effects
RESISTANCE
ANTIVIRAL THERAPY
• Target populations for treatment
- Definition of high risk
- Indications for treatment
- Timing of antiviral initiation
• Choice of antiviral drug
- Dosing
- Duration
- Oseltamivir resistance
• Pregnancy
• Hematopoietic cell
treatment of 2009 pandemic H1N1 influenza A infection are presented separately. (See "Treatment and prevention of pandemic H1N1 influenza ('swine influenza')", section on 'Treatment' and "Treatment and prevention of avian influenza", section on 'Treatment'.)
Investigational neuraminidase inhibitors are discussed below. (See 'Investigational approaches' below.)
Oseltamivir — Oseltamivir is orally administered and is available as a capsule or powder for liquid suspension. It has good bioavailability and is widely distributed in the body.
Oseltamivir has been demonstrated to shorten the duration of influenza symptoms [4-6,9,11,18-22], and to reduce the duration of viral shedding [17]. Some studies have also shown that oseltamivir reduces illness severity and complication rates [11,12]. As discussed below, subsequent meta-analyses have provided contradictory results regarding reduction in influenza-related lower respiratory tract complications in healthy adults [9,13].
Some studies have shown a mortality reduction [15,16] and shorter length of hospitalization in patients with severe influenza treated with oseltamivir [14].
In a 2003 meta-analysis of randomized trials, treatment with oseltamivir reduced the median duration of symptoms by 0.9 days in otherwise healthy adults and by 0.4 days in elderly adults or patients with comorbidities [5]. Subsequent meta-analyses have shown similar benefits [9,22].
The range of findings in adults can be illustrated by the following observations:
• A 60-center trial randomly assigned 627 healthy adults 18 to 65 years of age to oseltamivir (75 or 150 mg twice daily) or placebo for five days within 36 hours of the onset of suspected influenza [11]. Sixty percent had laboratory-confirmed influenza. Both doses of oseltamivir led to a statistically significant reduction in illness duration of approximately one day compared with placebo. Oseltamivir also reduced illness severity scores and the incidence of clinician-diagnosed secondary complications (pneumonia, bronchitis, sinusitis, and otitis media).
• Comparable results were noted in a 51-center trial with 719 healthy adult patients [6]. Among the 66 percent of patients with laboratory-confirmed influenza, oseltamivir significantly reduced the duration of illness by approximately one day in patients treated 24 to 36 hours after illness onset, and by
Help improve UpToDate. Did UpToDate answer your question? Yes No
完成
網際網路 | 受保護模式: 啟動
100%
CH
上午 12:07
2012/2/20

Oseltamivir

- Shorten the duration of influenza symptoms, and to reduce the duration of viral shedding.
- Some studies have also shown that oseltamivir reduces illness severity and complication rates [11,12]. As discussed below, subsequent meta-analyses have provided contradictory results regarding reduction in influenza-related lower respiratory tract complications in healthy adults [9,13].
- Some studies have shown a mortality reduction [15,16] and shorter length of hospitalization in patients with severe influenza [14].
- In a 2003 meta-analysis of randomized trials, reduced the median duration of symptoms by 0.9 days in otherwise healthy adults and by 0.4 days in elderly adults or patients with comorbidities [5]. Subsequent meta-analyses have shown similar benefits [9,22].

- A 60-center trial led to a statistically significant reduction in illness duration of approximately one day compared with placebo. Oseltamivir also reduced illness severity scores and the incidence of clinician-diagnosed secondary complications (pneumonia, bronchitis, sinusitis, and otitis media).
- A 51-center trial: reduced the duration of illness by approximately one day in patients treated 24 to 36 hours after illness onset, and by 1.5 to 2 days in those treated within 24 hours of illness onset.

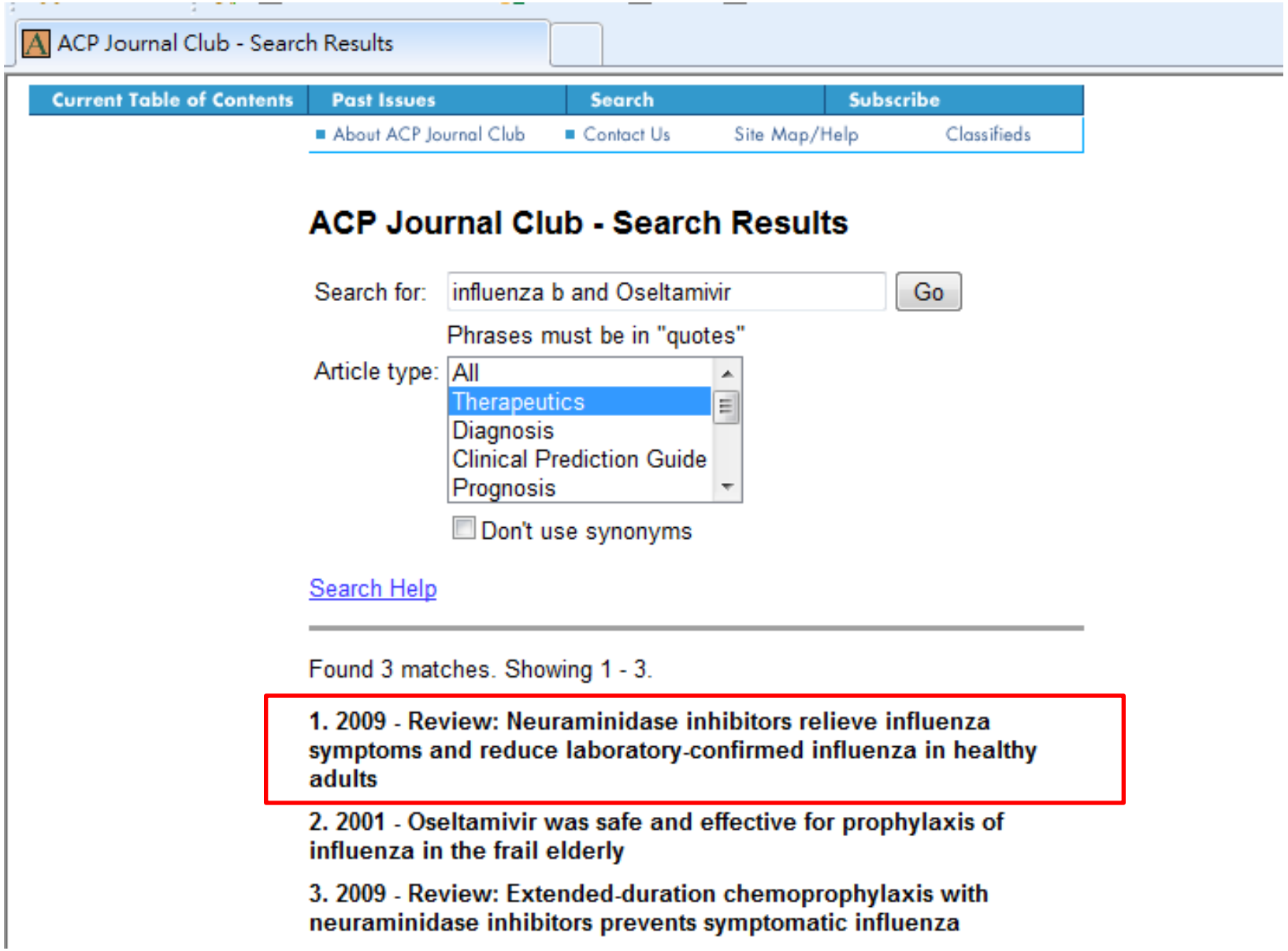
- A systematic review utilized data from 10 placebo-controlled trials to evaluate the effect of oseltamivir therapy on influenza-related lower respiratory tract complications [12]. Among patients with proven influenza, oseltamivir significantly reduced the incidence of lower respiratory tract complications that required antibiotic use compared with placebo (4.6 versus 10.3 percent in all patients, 12.2 versus 18.5 percent in patients at risk for complications).
- A subsequent meta-analysis did not show a reduction in influenza-related lower respiratory tract complications in healthy adults [9].
- However, another meta-analysis that reanalyzed the results from 11 randomized trials (including the 10 trials that were included in the initial systematic review) [12], concluded that oseltamivir treatment reduces the risk of lower respiratory tract complications by 28 percent overall (95% CI 11-42%) and by 37 percent among patients with confirmed influenza infections (95% CI 18-52%) [13]. All 11 trials that were included in the analyses that showed benefit were funded by the manufacturer of oseltamivir [12,13]

- Oseltamivir may be less effective in reducing clinical symptoms related to influenza B. In a prospective, multicenter study conducted in Japan, influenza A was documented in 1818 patients and influenza B in 1485 patients [18]. The duration from treatment initiation to resolution of fever was significantly longer for patients with influenza B than for influenza A (mean duration 65 versus 48 hours, respectively). In addition, after four to six days of oseltamivir therapy, the reisolation rate was higher for influenza B than for influenza A (52 versus 16 percent).

Level of Evidence	Grading Criteria	Grade of Recommendation
1a	Systematic review of RCTs including meta-analysis	A
1b	Individual RCT with narrow confidence interval	A
1c	All and none studies	B
2a	Systematic review of cohort studies	B
2b	Individual cohort study and low quality RCT	B
2c	Outcome research study	C
3a	Systematic review of case-control studies	C
3b	Individual case-control study	C
4	Case-series, poor quality cohort and case-control studies	C
5	Expert opinion	D

- 關鍵字：Oseltamivir, Influenza B

ACP journal club


ACP Journal Club - Search Results
Current Table of Contents
Past Issues
Search
Subscribe
About ACP Journal Club
Contact Us
Site Map/Help
Classifieds
ACP Journal Club - Search Results
Search for:
influenza b and Oseltamivir
Go
Phrases must be in "quotes"
Article type:
All
Therapeutics
Diagnosis
Clinical Prediction Guide
Prognosis
Don't use synonyms
Search Help
Found 3 matches. Showing 1 - 3.
1. 2009 - Review: Neuraminidase inhibitors relieve influenza symptoms and reduce laboratory-confirmed influenza in healthy adults
2. 2001 - Oseltamivir was safe and effective for prophylaxis of influenza in the frail elderly
3. 2009 - Review: Extended-duration chemoprophylaxis with neuraminidase inhibitors prevents symptomatic influenza

Prevention	Zanamivir or oseltamivir	Influenza-like illness	4 (3549)/22 to 49 d	4.3% vs 3.6%	RRI 20% (−23 to 87)	NS
Prevention	Zanamivir or oseltamivir	Laboratory-confirmed influenza	4 (3549)/22 to 49 d	4.2% vs 8.8%	RRR 52% (25 to 69)‡	NNT 22 (17 to 46)
Prevention / treatment	Oseltamivir, 75 mg/d	Nausea	2 (1088)/mean 49 d	9.5% vs 5.6%	RRI 71% (10 to 165)	NNH 26 (11 to 192)
Prevention / treatment	Oseltamivir, 150 mg/d	Nausea	1 (779)/NR	15% vs 6.9%	RRI 110% (31 to 226)	NNH 14 (7 to 47)
Treatment	Oseltamivir	Influenza complications§	3 (804)/NR	3.7% vs 6.7%	RRR 45% (−35 to 78)	NS
Treatment	Zanamivir	Symptom relief	6 (3188)/mean 26 d	NR	HR (CI) ‖ 1.24 (1.13 to 1.36)	NR
Treatment	Oseltamivir	Symptom relief	3 (1797)/mean 21 d	NR	1.20 (1.06 to 1.35)	NR

- Conclusion

In healthy adults, neuraminidase inhibitors relieve influenza symptoms and reduce risk for laboratory-confirmed influenza but not influenza-like illness or influenza complications.

- 關鍵字：Oseltamivir, Influenza B

資料來源：

Cochrane collaboration：(0)

- http://www.cochrane.org/

Search Results

Show Results in:
Cochrane Reviews [12] | Other Reviews [11] | Trials [649] | Methods Studies [3] | Technology Assessments [15] | Economic Evaluations [26] | Cochrane Groups [0]

There are **12** results out of **7092 records** for: "**influenza b, Oseltamivir** in **Title, Abstract or Keywords** in **Cochrane Database of Systematic Reviews**"

View: **1-12**

Export All Results

Record Information — Issue: Current | **All** — Restrict to: Reviews | Protocols — Sort by: Record Title

☐ **Neuraminidase inhibitors for preventing and treating influenza in children**
Kay Wang, Matthew Shun-Shin, Peter Gill, Rafael Perera, Anthony Harnden
January 2012
Review

☑ **Neuraminidase inhibitors for preventing and treating influenza in healthy adults and children**
Tom Jefferson, Mark A Jones, Peter Doshi, Chris B Del Mar, Carl J Heneghan, Rokuro Hama, Matthew J Thompson
January 2012
Review

Intervention Review

Neuraminidase inhibitors for preventing and treating influenza in healthy adults and children

Tom Jefferson[1,*], Mark A Jones[2], Peter Doshi[3], Chris B Del Mar[4], Carl J Heneghan[5], Rokuro Hama[6], Matthew J Thompson[5]

Database Title
The Cochrane Library

Editorial Group: Cochrane Acute Respiratory Infections Group

Published Online: 18 JAN 2012

Assessed as up-to-date: 12 APR 2011

DOI: 10.1002/14651858.CD008965.pub3

- We included and analysed data from 25 studies (15 oseltamivir and 10 zanamivir studies).
- All the studies were sponsored by manufacturers of NIs.
- Time to first alleviation of symptoms in people with influenza-like illness symptoms (i.e. ITT population) was a median of 160 hours (range 125 to 192 hours) in the placebo groups and oseltamivir shortened this by around 21 hours (95% confidence interval (CI) -29.5 to -12.9 hours, P < 0.001; five studies)
- There was no evidence of effect on hospitalisations based on seven studies with a median placebo group event rate of 0.84% (range 0% to 11%): odds ratio (OR) 0.95; 95% CI 0.57 to 1.61, P = 0.86.
- Due to limitations in the design, conduct and reporting of the trial programme, the data available to us lacked sufficient detail to credibly assess a possible effect of oseltamivir on complications and viral transmission.

是否可應用到此臨床個案上(Apply)

- 研究中的病患族群確和我們的病患一樣是相對健康的成人，除了可能有種族差異性
- Oseltamivir的給予可減短病程，但是否可減少併發症及傳播仍不確定，有些研究有效