



## BRINGING CLINICIANS TOGETHER TO DISCUSS CURRENT DRUG THERAPY

 January 2017  
 Vol. 14, No. 1

Based on

 The following succinct analysis appeared in *Pharmacist's Letter*.

 | pharmacist's letter™

Vol. 33. No. 1

**CARDIOLOGY**

Controversy will continue to brew over the safety of NSAIDs in patients at high cardiovascular risk.

All NSAIDs have a boxed warning about increased risk of CV events.

But the thinking has been that CV risk varies...with celecoxib (*Celebrex*, etc) more risky and naproxen the least risky.

Now we have results from the first big study that directly compares chronic NSAIDs in high-CV-risk patients. It suggests celecoxib, naproxen, and ibuprofen all have a SIMILAR risk of heart attack and stroke.

But this doesn't mean NSAIDs are safe in patients at high CV risk.

Plus, these results are mainly in patients on celecoxib 200 mg/day. Some patients need 400 mg/day...which may be linked to more CV events.

Continue to recommend limiting NSAID doses and durations in patients at high CV risk.

If a chronic NSAID is needed in a high-CV-risk patient, lean toward naproxen for a low-cost option. Explain doses up to 500 mg BID are okay.

Or suggest celecoxib...but the generic still costs about \$70/month. Advise trying to limit doses to 200 mg/day for high-CV-risk patients.

In general, lean away from ibuprofen for chronic use. It's less convenient due to TID dosing...and it seems to cause more renal problems.

Continue to consider celecoxib for CV patients with GI risk factors...age over 65, previous ulcer, or taking antithrombotics or corticosteroids. It causes fewer serious GI events than naproxen.

Recommend adding a PPI in patients at high GI risk, regardless of the NSAID used. But advise stopping the PPI when the NSAID is stopped.

Suggest low-dose aspirin for CV protection when appropriate.

Older concerns that some NSAIDs might reduce the antiplatelet effects of aspirin may not be as significant as previously thought. But caution that adding aspirin to an NSAID increases GI risk.

Topical NSAIDs may be worth a try for localized pain. It's too soon to say if they're less risky than orals, but absorption is less.

Listen to *PL VOICES* to hear our team discuss NSAID safety with the lead author of the new study. Also see our chart, *Managing NSAID Risks*, for answers to other common questions about NSAID safety.

(For more on this topic, see Professional Resource #330101 at [PharmacistsLetter.com](http://PharmacistsLetter.com).)

Primary Reference – Nissen SE, Yeomans ND, Solomon DH, et al. Cardiovascular safety of celecoxib, naproxen, or ibuprofen for arthritis. *N Engl J Med* 2016 Nov 13. doi: 10.1056/NEJMoa1611593.

See LEADER NOTES for answers to discussion questions

Discussion Questions

**Overview of current therapy**

1. What is known about the cardiovascular risk of NSAIDs?

**Analysis of new study**

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?**

**6. What were the strengths and weaknesses of this study?**

**7. Were the results expressed in terms we care about and can use?**

**How should the new findings change current therapy?**

**8. Do the results change your practice? How?**

**Apply the new findings to the following case**

M.W. is a 72-year-old male with a past medical history significant for hypertension, coronary artery disease with a cardiac stent placed 6 years ago, GERD, hyperlipidemia, prediabetes, and morbid obesity. His current medication regimen includes lisinopril 20 mg daily, hydrochlorothiazide 25 mg daily, atorvastatin 80 mg daily, and aspirin 81 mg daily. He presents for a follow up office visit today to discuss bilateral knee pain that was confirmed as osteoarthritis during a previous visit based on clinical symptoms and x-rays.

Vitals: blood pressure 139/88 mmHg, pulse 68, oxygen saturation 97%, temp 98.2 degrees, BMI 38.

M.W. states the knee pain seems to be progressing and that he can no longer do yard work like he used to.

**9. What should you recommend for initial treatment of M.W.'s osteoarthritis?**

You start M.W. on acetaminophen 1,000 mg three times daily as needed and refer him to physical therapy. He works hard and loses fifteen pounds through diet and exercise on a stationary bike. He returns for a follow up 3 months later and states that the knee pain is worsening and the acetaminophen isn't helping as much anymore. Currently he is reluctant to get a steroid knee injection. Instead he reports trying a friend's celecoxib and says that seemed to work well for him. He asks for more information and a prescription if you think it's a good idea.

**10. What should you discuss with M.W. regarding NSAIDs?**

M.W. was not aware of the cardiac risks associated with NSAIDs, but his knee pain is significantly impacting his quality of life. He is going to think about getting a steroid injection but would like to start a medication today. You decide to start him on celecoxib 200 mg daily due to his GI risk factors and have him follow up in one month.

**11. What additional NSAID side effects should you discuss with M.W.? Are there other medications that you should consider adding?**

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**Additional Pharmacist's Letter Resources** available at [PharmacistsLetter.com](http://PharmacistsLetter.com)

- Chart, Managing NSAID Risks. *Pharmacist's Letter/Prescriber's Letter*. January 2017.
- Chart, Safety Comparison of NSAIDs. *Pharmacist's Letter/Prescriber's Letter*. January 2017.
- PL VOICES, Safety of NSAIDs in Patients with CV Risks. *Pharmacist's Letter/Prescriber's Letter*. January 2017.
- Special Report, Rheumatoid Arthritis. *Pharmacist's Letter/Prescriber's Letter*. June 2016.
- Chart, Topicals for Pain Relief. *Pharmacist's Letter/Prescriber's Letter*. May 2016.
- Toolbox, Appropriate Opioid Use. *Pharmacist's Letter/Prescriber's Letter*. April 2016.
- Chart, Proton Pump Inhibitors: Appropriate Use and Safety Concerns. *Pharmacist's Letter/Prescriber's Letter*. March 2016.
- Chart, Pharmacotherapy of Neuropathic Pain. *Pharmacist's Letter/Prescriber's Letter*. November 2015.
- PL VOICES, Treatment of Osteoarthritis. *Pharmacist's Letter/Prescriber's Letter*. August 2015.
- Chart, Analgesics for Osteoarthritis. *Pharmacist's Letter/Prescriber's Letter*. July 2015.
- Commentary, Using Methotrexate Safely for Rheumatoid Arthritis. *Pharmacist's Letter/Prescriber's Letter*. October 2014.

## Welcome to PL Journal Club

PL Journal Club gives you insights and guides you to the discoveries that *Pharmacist's Letter* researchers and editors uncover. Each month we analyze many new studies and help you discover the answers to the hard questions. "What are the real advantages and disadvantages of new therapies?" "How do they compare with other options?" "What do pharmacists and prescribers need to know?" We look beyond the headlines and promotional materials to interpret the clinical studies and data. Sometimes the marketing spin doesn't stand up to scrutiny. Sometimes studies do not really prove what they are reported to prove. PL Journal Club helps guide you to the truth and how to apply new findings to patient care.

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