

## COX-2 INHIBITORS (ETORICOXIB) (UPDATED APRIL 2005)

### CLINICAL QUESTION

Are COX-2 inhibitors effective and safe in the management of chronic non-malignant low back pain  $\geq$  3 months' duration?

### THE EVIDENCE

Treatment	Condition	Comparator	Relevant Results/Authors' Conclusions
COX-2 inhibitor (etoricoxib <sup>a</sup> ) <sup>†</sup>	Chronic low back pain	Placebo	Evidence that etoricoxib (60 mg and 90 mg daily) significantly reduced pain at 12 weeks' follow up. Both etoricoxib doses produced similar results. Both etoricoxib doses led to a statistically significant higher incidence of AEs, judged by the investigator to be drug-related, compared to placebo.

<sup>†</sup>Based on one randomized controlled trial (RCT) published in 2004 that **was not assessed** for methodological quality.

### ADDITIONAL NOTES

<sup>a</sup>Etoricoxib (Arcoxia<sup>®</sup>) is a new COX-2 inhibitor that has yet to receive approval for marketing in Canada.

Rofecoxib (Vioxx<sup>®</sup>), a COX-2 selective inhibitor widely used for pain control, was withdrawn from the market by Merck & Co., Inc. on September 30, 2004. After 18 months of treatment, patients taking rofecoxib (25 mg daily) had twice the risk of heart attack and stroke, compared with those receiving placebo.

Health Canada recommended usage restrictions for another COX-2 selective inhibitor celecoxib (Celebrex<sup>®</sup>) beginning in April 2005. Celebrex<sup>®</sup> should not be used in patients who have had a heart attack or stroke, serious chest pain related to heart disease, or congestive heart failure. Celebrex<sup>®</sup> may increase the risk of cardiovascular events in patients with high blood pressure, high cholesterol, diabetes, and smoking. Also, Celebrex<sup>®</sup> should be prescribed and used at the lowest possible dose and for the shortest, necessary period of time.

The US Food and Drug Administration and Health Canada stated that the long-term effects of COX-2 inhibitors need to be studied to establish whether other drugs in this class have similar dangerous side effects.

### IMPLICATIONS FOR PRACTICE

#### What we don't know:

- What is the safety and effectiveness of etoricoxib and other COX-2 inhibitors compared to other active treatments for chronic low back pain?
- What is the long-term (> 3 months) effectiveness, safety, and tolerability of etoricoxib and other COX-2 inhibitors for the treatment of chronic low back pain?
- What is the safety and effectiveness of treating patients with a combination of etoricoxib or other COX-2 inhibitors and aspirin?

The Ambassador Project was initially funded by a one time grant from the Canadian Agency for Drugs and Technologies in Health (May 2004 to April 2005) (formerly the Canadian Coordinating Office for Health Technology Assessment). The Institute of Health Economics has provided funding to continue the Project.

### Research Evidence: What we know

In patients with chronic low back pain, the evidence indicates that etoricoxib is more effective than placebo irrespective of dose (60 mg or 90 mg) daily over 12 weeks.

The most common **side effects** associated with etoricoxib use were diarrhea, headache, and worsening of low back pain.

### Recommendation from Clinical Ambassadors

COX-2 inhibitors are an effective treatment for low back pain, but there is no proof that they are better than conventional NSAIDs.

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April 2005

**Reference:** This Evidence Brief is based on results from a research study that **was not assessed** for methodological quality.  
Moga C, Harstall C. *COX-2 inhibitors (etoricoxib) for the treatment of non-malignant chronic low back pain*. Edmonton, Alberta: Alberta Heritage Foundation for Medical Research, Health Technology Assessment; 2005 Jan. Report: TechNote 48 (updated April 2005). Available upon request: info@ihe.ca

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