

PROVIDER BULLETIN

Published by Wyoming Workers' Safety & Compensation Medical Case Management Unit.
April 2011

The Drug Effectiveness Review Project (DERP) reviewed the comparative effectiveness of Celebrex (celecoxib) and the non-selective and semi-selective non-steroidal anti-inflammatory drugs (NSAIDs) in a report published November 2010¹. The following conclusions were made:

- Celecoxib and the non-selective and semi-selective NSAIDs are associated with similar levels of pain reduction in short-term randomized controlled trials.
- A short-term advantage may be provided by celecoxib over non-selective NSAIDs in terms of upper gastrointestinal adverse events, however, this advantage has not been demonstrated in trials greater than six months in duration. Celecoxib had similar rates of ulcer when a proton pump inhibitor was added to a non-selective NSAID in three randomized controlled studies.
- Adding a proton pump inhibitor to celecoxib may be beneficial for those at very high risk of gastrointestinal adverse events (recent upper gastrointestinal bleed) for decreasing incidence of recurrent bleeding.
- Celecoxib was not significantly different from non-selective NSAIDs in regards to cardiovascular events.

Celebrex is significantly more expensive than the non-selective and semi-selective NSAIDs, even when the cost of an additional proton pump inhibitor is considered.

Selected NSAIDs	Quantity	Price ²
Celebrex 200 mg	60	\$281.98
Ibuprofen 800 mg	90	\$16.95
Naproxen 500 mg	60	\$17.99
Diclofenac CR 100 mg	30	\$75.99
Etodolac CR 500 mg	60	\$69.96
Nabumetone 750 mg	60	\$65.99
Oxaprozin 600 mg	60	\$19.99
Meloxicam 15 mg	30	\$12.99
Selected PPIs	Quantity	Price
Omeprazole 20 mg	30	\$32.99
Pantoprazole 40 mg	30	\$15.99

●As a result of the above analysis, WSCD is requesting that providers use a non-selective NSAID with or without a proton pump inhibitor first-line for Workers' Compensation patients who are not at high risk for upper gastrointestinal events. Trial and failure of two non-selective NSAIDs, or evidence of high risk for upper gastrointestinal events will be required prior to approval of Celebrex.

●Celebrex, a COX-2 inhibitor is also frequently used as part of a perioperative pain control "cocktail" due to the fact that Celebrex does not significantly prolong the Prottime or INR and this use of Celebrex continues to be authorized or acceptable to the Division of Workers' Compensation.

References:

1. Peterson K, McDonagh M, Thakurta S, Dana T, Roberts C, Chou R, Helfand M. Drug class review: Nonsteroidal anti-inflammatory drugs (NSAIDs). Update 4 final report, Executive Summary. <http://derp.ohsu.edu/about/final-document-display.cfm>
2. DrugStore.com. Accessed March 29, 2011.