

NEW JERSEY  
MEDICARE  
PATIENT  
SAFETY  
PROGRAM

## Potentially Inappropriate Medication (PIM)\* In Focus: Propoxyphene

**Medication:** Propoxyphene (Darvon<sup>®</sup>); Propoxyphene combinations (Darvon-N<sup>®</sup>, Darvocet<sup>®</sup>, Darvocet-N<sup>®</sup>)

**Therapeutic Class:** Opioid analgesic

**Use(s):** Relief of mild to moderate pain

**Clinical Concern(s):** Accumulation of toxic metabolite in the elderly caused by decreased renal function increases the risk of central nervous system (CNS) adverse effects such as dizziness, sedation, confusion, and ataxia in the elderly; risk factor for hip fracture in adults age 65 years or older; data suggest no clinical advantage over acetaminophen alone.

**Discussion:** Propoxyphene use should be avoided in the elderly due to its associated adverse effects, poor efficacy, and availability of safer alternatives.

### Possible Alternatives:

For persistent or episodic mild to moderate pain: acetaminophen.

For persistent or episodic moderate to severe pain: hydrocodone.

The most appropriate alternative is dependent on the cause, type, and severity of pain and other factors. Thorough assessment of pain is essential to pain management.

\*According to Beers criteria

*This information is not intended to provide medical advice, diagnosis or treatment.*

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## References and Resources

### **Potentially Inappropriate Medication**

Fick DM, Cooper JW, Wade WE, et al. Updating the Beers criteria for potentially inappropriate medication use in older adults. *Archives of Internal Medicine* [Internet]. 2003 [cited 2008 Oct 15];163(22)::2716-2724. Available from: <http://archinte.ama-assn.org/cgi/content/full/163/22/2716>

Barkin RL, Barkin SJ, Barkin DS. Propoxyphene (dextropropoxyphene): a critical review of a weak opioid analgesic that should remain in antiquity. *American Journal of Therapeutics* [Internet]. 2006 Nov/Dec [cited 2008 Oct 15];13(6):534-542. Available from: <http://www.americantherapeutics.com/pt/re/ajt/abstract.00045391-200611000-00012.htm;jsessionid=JJ7N5xhQ4tn9qWvptpC20MvcBS776Mr1YzDpgCvHRhrp1FKJ0mK01600976923181195628!8091!-1>

Kamel-Bahl SJ, Stuart BC, Beers MH. Propoxyphene use and hip fractures in older adults. *The American Journal of Geriatric Pharmacology* [Internet]. 2006 Sep [cited 2008 Oct 15];4(3):219-226. Available from: [http://www.sciencedirect.com/science?\\_ob=ArticleURL&\\_udi=B7CWH-4M5FNN2-3&\\_user=10&\\_rdoc=1&\\_fmt=&\\_orig=search&\\_sort=d&view=c&\\_version=1&\\_urlVersion=0&\\_userid=10&md5=2596ee45c308d7e034c68efbf6494dcb](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B7CWH-4M5FNN2-3&_user=10&_rdoc=1&_fmt=&_orig=search&_sort=d&view=c&_version=1&_urlVersion=0&_userid=10&md5=2596ee45c308d7e034c68efbf6494dcb)

Li Wan Po A, Zhang WY. Systematic overview of co-proxamol to assess analgesic effects of addition of dextropropoxyphene to paracetamol. *British Medical Journal* [Internet]. 1997 Dec 13 [cited 2008 Oct 15];315:1565–1571. Available from: <http://www.bmj.com/cgi/content/full/315/7122/1565>

Zhan C, Sangl, J, Bierman AS, et al. Potentially inappropriate medication use in the community-dwelling elderly: findings from the 1996 Medical Expenditure Panel Survey. *Journal of the American Medical Association* [Internet]. 2001 Dec 12 [cited 2008 Oct 15];286(22):2823-2829. Available from: <http://jama.ama-assn.org/cgi/content/full/286/22/2823>

### **Pain Management Resources**

**Pain Management: The Online Series** - Available from: [http://www.ama-cmeonline.com/pain\\_mgmt/index.htm](http://www.ama-cmeonline.com/pain_mgmt/index.htm)

The American Medical Association offers a free on-line CME series on Pain Management that includes a module, “Assessing and Treating Pain in Older Adults.” The module provides pain assessment tools and describes pharmacologic and nonpharmacologic treatment strategies specific to older adults. [Accessed: 2008 Oct 15]

**Acute Pain Management in Older Adults** - Available from:

[http://www.guideline.gov/summary/summary.aspx?ss=15&doc\\_id=10198&nbr=5382#s22](http://www.guideline.gov/summary/summary.aspx?ss=15&doc_id=10198&nbr=5382#s22)

**Persistent Pain Management** - Available from:

[http://www.guideline.gov/summary/summary.aspx?doc\\_id=8627&nbr=004807](http://www.guideline.gov/summary/summary.aspx?doc_id=8627&nbr=004807)

The University of Iowa Gerontological Nursing Interventions Research Center has developed evidenced-based guidelines on the management of acute pain in the elderly, updated in 2006, and on the management of persistent pain in the elderly updated in 2005. An abbreviated version of these guidelines is also available on the National Guideline Clearinghouse website. [Accessed: 2008 Oct 15]