



## **Patients Taking Cymbalta(R) Reported Reduced Pain Severity of Osteoarthritis of the Knee in New Study**

### **Patients on Treatment Also Experienced Improved Physical Functioning**

INDIANAPOLIS, June 13, 2008 /PRNewswire-FirstCall via COMTEX News Network/ -- New data suggest that patients with osteoarthritis pain of the knee treated with 60 mg and 120 mg Cymbalta (duloxetine HCl) once daily experienced significant pain reduction. Patients taking duloxetine reported significant pain improvement compared to placebo within the first week of treatment that lasted throughout the 13-week trial.(1) Results from the study of 231 patients were presented today at the annual congress of the European League Against Rheumatism (EULAR) in Paris, France.

Duloxetine showed statistically significant improvement in pain associated with osteoarthritis of the knee according to the primary efficacy measure of mean 24-hour average pain scores. Fifty-nine percent of duloxetine-treated patients experienced a 30 percent improvement in pain compared with 45 percent of patients taking placebo. Forty-seven percent of duloxetine-treated patients experienced a 50 percent improvement in pain compared with 29 percent of placebo-treated patients.

Treatment with duloxetine also was associated with improved patient outcomes compared with placebo as measured by the Patient Global Impressions of Improvement (PGI-I) and physical functioning as measured by the Western Ontario and McMaster Universities (WOMAC) physical functioning subscale.

In this study, the most common adverse events (occurred at a rate of greater than or equal to 3 percent and at least twice the rate of placebo) were nausea, fatigue, somnolence, dizziness, hypertension, constipation and decreased libido.

"These data are important because it's the first time duloxetine has been studied in a large, placebo-controlled trial in what's classified as an inflammatory disease state," said Amy Chappell, M.D., lead study author and medical fellow II, Eli Lilly and Company. "Although the exact mechanism of action is unknown, this study may provide important insights into the treatment of pain in the central nervous system."

It is estimated that 27 million adults in the United States have osteoarthritis and the prevalence increases with age.(2) Osteoarthritis of the knee is a common type of this disorder, impacting the lives of approximately 10 million Americans.(2) Other symptoms of osteoarthritis in addition to pain include aching, stiffness and limited range of motion of the joint.(3)

#### **Additional Study Highlights:**

- Compared with patients receiving placebo, patients receiving duloxetine experienced significant improvement in symptom severity associated with osteoarthritis pain of the knee, including:
  - \* Significantly greater reduction in Brief Pain Inventory (BPI) average pain severity ( $p < 0.001$ ) and WOMAC scores for pain ( $p = 0.003$ )
  - \* Overall improved clinical global assessment according to Clinical Global Impressions of Severity (CGI-S) ( $p = 0.001$ )
- A total of 22 (9.5 percent) patients discontinued due to adverse events
  - seven (5.8 percent) in the placebo-treated group and 15 (13.5 percent) in the duloxetine-treated group.

#### **Methods**

In this study, 111 patients were randomly assigned to receive 60 mg per day of duloxetine; 120 patients received placebo. Patients were stratified by whether or not they used non-steroidal anti-inflammatory drugs (NSAIDs) on a regular basis. At week seven, those receiving active treatment were re-randomized to either 60 mg duloxetine or 120 mg duloxetine per day. The duloxetine groups were combined for overall analyses. The primary endpoint of the study was reduction of pain severity as measured by the weekly mean of the 24-hour average pain scores. Changes from baseline to endpoint were analyzed using a mixed-effects model repeated measures (MMRM) approach. Secondary measures included effects on associated pain and

functioning. Pain and functional outcomes were assessed using Patient Global Impressions of Improvement (PGI-I), Western Ontario and McMaster Universities (WOMAC) pain and physical functioning subscales, Clinical Global Impressions of Severity (CGI-S) and Brief Pain Inventory (BPI)-Severity. Patients with a recent diagnosis (within six months) of major depressive disorder were excluded from this study.

## About Cymbalta

Serotonin and norepinephrine in the brain and spinal cord are believed to both mediate core mood symptoms and help regulate the perception of pain. Based on preclinical studies, Cymbalta is a balanced and potent reuptake inhibitor of serotonin and norepinephrine that is believed to potentiate the activity of these chemicals in the central nervous system (brain and spinal cord). While the mechanism of action of Cymbalta is not fully known, scientists believe its effects on depression and anxiety symptoms, as well as its effect on pain perception, may be due to increasing the activity of serotonin and norepinephrine in the central nervous system.

Cymbalta is approved in the United States for the acute and maintenance treatment of major depressive disorder, the acute treatment of generalized anxiety disorder and the management of diabetic peripheral neuropathic pain, all in adults (18+). Cymbalta is not approved for use in pediatric patients.

## Important Safety Information

Cymbalta is approved to treat major depressive disorder and generalized anxiety disorder and manage diabetic peripheral neuropathic pain. Antidepressants can increase suicidal thoughts and behaviors in children, adolescents and young adults. Patients should call their doctor right away if they experience new or worsening depression symptoms, unusual changes in behavior, or thoughts of suicide. Be especially observant within the first few months of treatment or after a change in dose. Cymbalta is approved only for adults 18 and over.

Cymbalta is not for everyone. Patients should not take Cymbalta if they have recently taken a type of antidepressant called a monoamine oxidase inhibitor (MAOI), are taking Mellaril(R) (thioridazine) or have uncontrolled glaucoma. Patients should speak with their doctor about any medical conditions they may have, including liver or kidney problems, glaucoma, or diabetes. Patients should tell their doctor about all their medicines, including those for migraine, to avoid a potentially life-threatening condition. Taking Cymbalta with NSAID pain relievers, aspirin, or blood thinners may increase bleeding risk. They also should talk to their doctor about their alcohol consumption. Patients should consult with their doctor before stopping Cymbalta or changing the dose and if they are pregnant or nursing.

Patients taking Cymbalta may experience dizziness or fainting upon standing. The most common side effects of Cymbalta include nausea, dry mouth, sleepiness and constipation.

This is not a complete list of side effects.

For full Patient Information, visit [www.cymbalta.com](http://www.cymbalta.com).

For full Prescribing Information, including Boxed Warning and medication guide, visit <http://www.cymbalta.com/>.

## About Eli Lilly and Company

Lilly, a leading innovation-driven corporation, is developing a growing portfolio of first-in-class and best-in-class pharmaceutical products by applying the latest research from its own worldwide laboratories and from collaborations with eminent scientific organizations. Headquartered in Indianapolis, Ind., Lilly provides answers -- through medicines and information -- for some of the world's most urgent medical needs. Additional information about Lilly is available at [www.lilly.com](http://www.lilly.com).

## P-LLY

This press release contains forward-looking statements about the potential of Cymbalta for chronic pain including the management of osteoarthritis pain of the knee and reflects Lilly's current beliefs. However, as with any pharmaceutical product, there are substantial risks and uncertainties in the process of development and commercialization. There is no guarantee that the product will continue to be commercially successful. For further discussion of these and other risks and uncertainties, see Lilly's filings with the United States Securities and Exchange Commission. Lilly undertakes no duty to update forward-looking statements.

(Logo: <http://www.newscom.com/cgi-bin/prnh/20031219/LLYLOGO> )

(1) Lilly HMEP study

(2) Lawrence, RC, et al. Estimates of the Prevalence of Arthritis and Other Rheumatic Conditions in the United States. 2008. Arthritis and Rheumatism (58):26-35.

(3) National Pain Foundation Website - [http://www.nationalpainfoundation.org/MyTreatment/articles/Arthritis\\_Types.asp](http://www.nationalpainfoundation.org/MyTreatment/articles/Arthritis_Types.asp) accessed on 5/5/08.

SOURCE Eli Lilly and Company

Copyright (C) 2008 PR Newswire. All rights reserved

News Provided by COMTEX