



## New Published Analysis Finds Opioid-Related Adverse Events Increase Hospital Stays, Costs of Care and Risks of Readmission and Mortality

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*Retrospective Study Published in Pharmacotherapy Identifies Advanced Age, Obesity, Pre-Surgery Opioid Use and Comorbid Conditions as Predictive Risk Factors for Adverse Events*

PARSIPPANY, N.J.--(BUSINESS WIRE)--Apr. 25, 2013-- [Pacira Pharmaceuticals, Inc.](#) (NASDAQ: PCRX) today announced the publication of findings from a retrospective analysis of more than 37,000 patients who underwent common inpatient surgeries at a large, 26-hospital healthcare system and received opioids for postsurgical pain management. According to the data, published in this month's issue of *Pharmacotherapy*, patients who experienced opioid-related adverse events (ORAEs) had statistically significantly higher hospital costs, longer hospital stays and increased risks of readmission and mortality.

Specifically, patients experiencing an ORAE:

- Had a **55 percent longer hospital stay** than patients without an ORAE (9.5 days vs. 6.1 days,  $P<0.001$ )
- Had a **47 percent higher hospitalization cost** compared to patients without an ORAE (\$21,012 vs. \$14,291,  $P<0.001$ )
- Had a **36 percent increased risk of 30-day readmission** compared to patients without an ORAE ( $P<0.001$ )
- Had a **3.4 times greater risk of inpatient mortality** than patients without an ORAE ( $P<0.001$ )

Researchers were also able to identify a series of characteristics that increased patients' risks for ORAEs. Predictive risk factors for an adverse event related to opioid use included: patient age of 65 or older, obesity, greater number of comorbidities and pre-surgery opioid use.

"This regionally focused analysis mirrors findings from previously published national analyses that demonstrated the meaningful and measurable impact of opioid-related adverse events on patient outcomes and healthcare system costs," said Dave Stack, President and CEO of Pacira Pharmaceuticals, Inc. "While opioids have long been the mainstay of postsurgical pain management, a recent groundswell of advocacy to mitigate potentially fatal side effects may drive a shift in the current postsurgical pain management paradigm toward non-opioid or opioid-sparing pain regimens, especially in high-risk patients."

In this retrospective analysis, researchers reviewed administrative discharge data at 26 hospitals in the southeastern United States, and identified 37,031 adult patients who underwent common soft tissue and orthopedic surgical procedures from January 2009 to December 2010. Among this patient sample, 98.6 percent received opioids after surgery, and 13.6 percent of those received a diagnosis of respiratory, gastrointestinal, central nervous system, urinary or other opioid-related adverse events during hospitalization.

Researchers conducted statistical analysis to evaluate risk factors that may predispose patients to postsurgical ORAEs and compared differences in length of stay, total hospitalization costs, 30-day readmission rates and inpatient mortality between the patients who experienced an ORAE and those who did not.

The research was supported by Pacira Pharmaceuticals, Inc. The full publication is available online [here](#).

### About Pacira

Pacira Pharmaceuticals, Inc. (NASDAQ: PCRX) is an emerging specialty pharmaceutical company focused on the clinical and commercial development of new products that meet the needs of acute care practitioners and their patients. The company's current emphasis is the development of non-opioid products for postsurgical pain control, and its lead product, EXPAREL® (bupivacaine liposome injectable suspension), was commercially launched in the United States in April 2012. EXPAREL and two other products have utilized the Pacira proprietary product delivery technology DepoFoam®, a unique platform that encapsulates drugs without altering their molecular structure and then releases them over a desired period of time. Additional information about Pacira is available at [www.pacira.com](http://www.pacira.com).

### About EXPAREL®

EXPAREL (bupivacaine liposome injectable suspension) is indicated for single-dose infiltration into the surgical site to produce postsurgical analgesia. The product combines bupivacaine with DepoFoam, a proven product delivery technology that delivers medication over a desired time period. EXPAREL represents the first and only multivesicular liposome local anesthetic that can be utilized in the peri- or postsurgical setting in the same fashion as current local anesthetics. By utilizing the DepoFoam platform, a single dose of EXPAREL delivers bupivacaine over time, providing analgesia with reduced opioid requirements for up to 72 hours. Pivotal studies have demonstrated the safety and efficacy of EXPAREL in patients undergoing bunionectomy or hemorrhoidectomy procedures and additional studies are underway to further demonstrate the safety and efficacy in other procedures. Additional information is available at [www.EXPAREL.com](http://www.EXPAREL.com).

### Important Safety Information

EXPAREL is contraindicated in obstetrical paracervical block anesthesia. EXPAREL has not been studied for use in patients younger than 18 years of age. Non-bupivacaine-based local anesthetics, including lidocaine, may cause an immediate release of bupivacaine from EXPAREL if administered together locally. The administration of EXPAREL may follow the administration of lidocaine after a delay of 20 minutes or more. Other formulations of bupivacaine should not be administered within 96 hours following administration of EXPAREL. Monitoring of cardiovascular and neurological status, as well as vital signs should be performed during and after injection of EXPAREL as with other local anesthetic products. Because amide-type local

anesthetics, such as bupivacaine, are metabolized by the liver, EXPAREL should be used cautiously in patients with hepatic disease. Patients with severe hepatic disease, because of their inability to metabolize local anesthetics normally, are at a greater risk of developing toxic plasma concentrations. In clinical trials, the most common adverse reactions (incidence greater-than or equal to 10%) following EXPAREL administration were nausea, constipation, and vomiting.

Please see the full Prescribing Information for more details available at [http://www.exparel.com/pdf/EXPAREL\\_Prescribing\\_Information.pdf](http://www.exparel.com/pdf/EXPAREL_Prescribing_Information.pdf).

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