

# EXPAREL drives superior outcomes in TKA in the adductor canal pivotal trial compared to bupivacaine HCl<sup>1</sup>

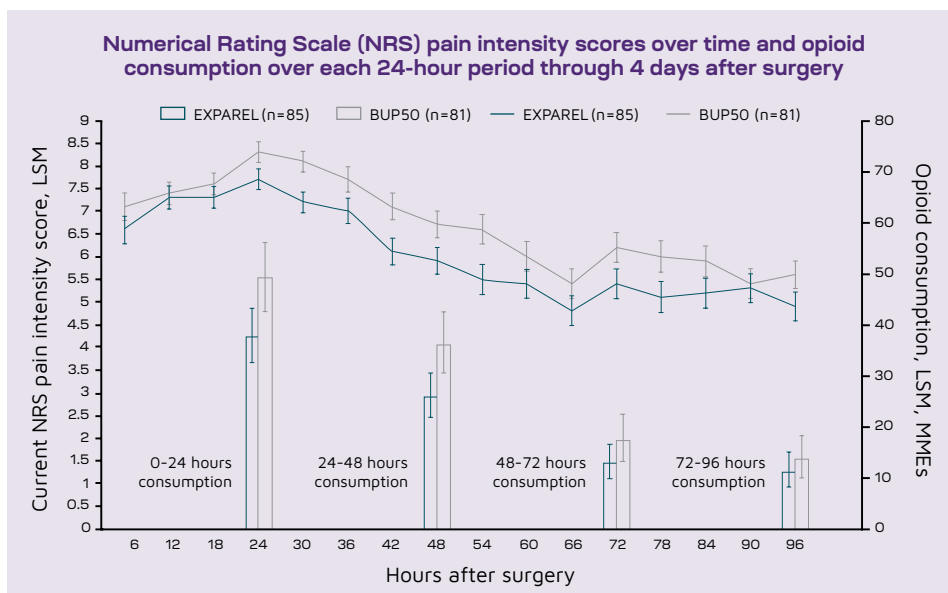
**EXPAREL**  
(bupivacaine liposome injectable suspension)

The adductor canal pivotal trial investigated the efficacy, safety, pharmacokinetics, and pharmacodynamics of EXPAREL admixed with bupivacaine hydrochloride (HCl) versus bupivacaine HCl alone, administered as an adductor canal block (ACB) for total knee arthroplasty (TKA).

## The data shows that EXPAREL\*

### Provided greater postsurgical pain control<sup>1</sup>

Compared with bupivacaine HCl alone, EXPAREL provided greater pain relief through 4 days ( $P=0.0074$ ).<sup>†</sup> These differences were statistically significant from Day 2 through Day 4 postsurgery.



**Study design:** Multicenter, randomized, double-blind, active-controlled study versus bupivacaine HCl designed to eliminate confounders and isolate the effects of EXPAREL by limiting the multimodal non-opioid analgesics permitted and providing opioid rescue on an as-needed basis only.

Frequency of adverse events (AEs) was similar between the EXPAREL and bupivacaine HCl groups; most AEs were mild to moderate in severity. The most common AEs (>10%) in the EXPAREL group were nausea, constipation, muscle spasms, and headache.



### Reduces opioid consumption<sup>1†§</sup>

Compared to bupivacaine HCl alone, EXPAREL

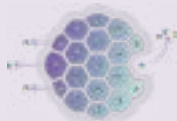
- Significantly lowered total opioid consumption 23% through 4 days ( $P=0.0071$ )
- Statistically reduced opioid consumption on Day 1, Day 2, and Day 3 postsurgery



### Has a similar safety profile to bupivacaine HCl<sup>1</sup>

- No participants had weakness or motor deficit at discharge
- Maximum bupivacaine plasma concentration (495 ng/mL) was well below threshold for local anesthetic systemic toxicity<sup>2,3</sup>

## Explore the innovation behind the evidence



EXPAREL uses **proprietary multivesicular liposome (pMVL) technology**, which allows the delivery of controlled levels of bupivacaine over time<sup>4</sup>



Learn more about how **EXPAREL** is different from bupivacaine HCl

\*EXPAREL admixed with bupivacaine; <sup>†</sup>Primary endpoint; <sup>‡</sup>Secondary endpoints; <sup>§</sup>The clinical benefit of the decrease in opioid consumption was not demonstrated in the pivotal trials.

## Indication

EXPAREL<sup>®</sup> (bupivacaine liposome injectable suspension) is indicated to produce postsurgical local analgesia via infiltration in patients aged 6 years and older and regional analgesia in adults via an interscalene brachial plexus nerve block, sciatic nerve block in the popliteal fossa, and an adductor canal block. Safety and efficacy have not been established in other nerve blocks.

## Important Safety Information

EXPAREL is contraindicated in obstetrical paracervical block anesthesia.

Adverse reactions reported in adults with an incidence greater than or equal to 10% following EXPAREL administration via infiltration were nausea, constipation, and vomiting; adverse reactions reported in adults with an incidence greater than or equal to 10% following EXPAREL administration via nerve block were nausea, pyrexia, headache, and constipation.

Adverse reactions with an incidence greater than or equal to 10% following EXPAREL administration via infiltration in pediatric patients six to less than 17 years of age were nausea, vomiting, constipation, hypotension, anemia, muscle twitching, vision blurred, pruritus, and tachycardia.

Do not admix lidocaine or other non-bupivacaine local anesthetics with EXPAREL. EXPAREL may be administered at least 20 minutes or more following local administration of lidocaine.

EXPAREL is not recommended to be used in the following patient populations: patients <6 years old for infiltration, patients younger than 18 years old for nerve blocks, and/or pregnant patients.

Because amide-type local anesthetics, such as bupivacaine, are metabolized by the liver, EXPAREL should be used cautiously in patients with hepatic disease.

## Warnings and Precautions Specific to EXPAREL

Avoid additional use of local anesthetics within 96 hours following administration of EXPAREL.

EXPAREL is not recommended for the following types or routes of administration: epidural, intrathecal, regional nerve blocks **other than interscalene brachial plexus nerve block, sciatic nerve block in the popliteal fossa, and adductor canal block**, or intravascular or intra-articular use.

The potential sensory and/or motor loss with EXPAREL is temporary and varies in degree and duration depending on the site of injection and dosage administered and may last for up to 5 days, as seen in clinical trials.

## Warnings and Precautions for Bupivacaine-Containing Products

**Central Nervous System (CNS) Reactions:** There have been reports of adverse neurologic reactions with the use of local anesthetics. These include persistent anesthesia and paresthesia. CNS reactions are characterized by excitation and/or depression.

**Cardiovascular System Reactions:** Toxic blood concentrations depress cardiac conductivity and excitability, which may lead to dysrhythmias, sometimes leading to death.

**Allergic Reactions:** Allergic-type reactions (eg, anaphylaxis and angioedema) are rare and may occur as a result of hypersensitivity to the local anesthetic or to other formulation ingredients.

**Chondrolysis:** There have been reports of chondrolysis (mostly in the shoulder joint) following intra-articular infusion of local anesthetics, which is an unapproved use.

**Methemoglobinemia:** Cases of methemoglobinemia have been reported with local anesthetic use.

Full Prescribing Information is available at [www.EXPAREL.com](http://www.EXPAREL.com).

For more information, please visit [www.EXPAREL.com](http://www.EXPAREL.com) or call 1-855-793-9727.

**REFERENCES:** **1.** Gadsden J, Hamilton M, Schwartz G, et al. Liposomal bupivacaine via adductor canal block after total knee arthroplasty: a randomized, double-blind, phase 3 trial. Poster presented at: 48th Annual Regional Anesthesiology and Acute Pain Medicine Meeting; April 20, 2023; Hollywood, FL. Poster 4381. **2.** Knudsen K, Beckman Suurkula M, Blomberg S, et al. Central nervous and cardiovascular effects of i.v. infusions of ropivacaine, bupivacaine and placebo in volunteers. *Br J Anaesth.* 1997;78(5):507-514. **3.** New York School of Regional Anesthesia. Clinical pharmacology of local anesthetics. 2019. Accessed November 7, 2023. <https://www.nysora.com/topics/pharmacology/clinical-pharmacology-local-anesthetics/> **4.** Bramlett K, Onel E, Viscusi ER, Jones K. A randomized, double-blind, dose-ranging study comparing wound infiltration of DepoFoam bupivacaine, an extended-release liposomal bupivacaine, to bupivacaine HCl for postsurgical analgesia in total knee arthroplasty. *Knee.* 2012;19(5):530-536.