An Ethical Imperative

The Essential Need for Effective Pain Management in Laboratory Mice and Rats

“The appropriate use of anesthetics, tranquilizers, analgesics, and nonpharmacologic interventions in research animals is an ethical and scientific imperative. Pain and distress are undesirable variables in most scientific research projects, and if not relieved, can result in unacceptable animal welfare and invalid scientific outcomes.”

—American College of Laboratory Animal Medicine (ACLAM), Position Statement on Pain and Distress in Research Animals

Pharmaceutical Grade Medications Help Limit Risks—Use When Available

“The use of pharmaceutical grade chemicals and other substances ensures that toxic or unwanted side effects are not introduced into studies conducted with experimental animals. They should therefore be used, when available, for all animal-related procedures (USDA 1977b).”

—NIH Guide for the Care and Use of Laboratory Animals
NEW Ethiqa XR™
Confident Pharmaceutical Grade Quality³

The only FDA-indexed cGMP extended-release buprenorphine

- Proven long-acting, extended-release technology
- Reduces breakthrough pain seen with short-acting formulations
- Clinically significant blood levels were observed up to 72 hours after subcutaneous administration in mice and rats with one injection
- One dose minimizes the inconvenience and animal stress of multiple injections

3 Days of Pharmaceutical Grade Relief

Please see Important Safety Information and Boxed Warning on reverse and accompanying Prescribing Information.
Pure Peace of Mind with FDA-Indexed Safety

Assurance of pharmaceutical grade purity and FDA-validated data

• Demonstrated safe in extensive clinical studies at up to 5 times the indicated dose in mice and 10 times the indicated dose in rats following surgery
• Dermal safety assurance — no evidence of crusty injection-site skin lesions following administration
• Less discomfort and stress for lab animals and less handling by researchers

Ethiqa XR Specifications

<table>
<thead>
<tr>
<th>Packaging</th>
<th>Multi-dose 3 mL vials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buprenorphine concentration</td>
<td>1.3 mg/mL</td>
</tr>
<tr>
<td>Dosing—Mice</td>
<td>Single subcutaneous injection of 0.05 mL per 20-gram mouse (3.25 mg/kg body weight)</td>
</tr>
<tr>
<td>Dosing—Rats</td>
<td>Single subcutaneous injection of 0.1 mL per 200-gram rat (0.65 mg/kg body weight)</td>
</tr>
<tr>
<td>Dose Repetition</td>
<td>If needed, a single repeat dose may be administered after the initial dose</td>
</tr>
<tr>
<td>Syringe/Needle Size</td>
<td>Use a 0.5- or 1.0-mL syringe fitted with a 20- to 23-gauge needle for injections</td>
</tr>
<tr>
<td>Stability</td>
<td>Approved for 12-month shelf life</td>
</tr>
<tr>
<td>Storage</td>
<td>Store vial at 15° to 25°C (59° to 77°F) or refrigerated. Do not freeze.</td>
</tr>
</tbody>
</table>

Get the Relief of Ethiqa XR™ Today
Visit ethiqaxr.com for additional information.

Learn more at ethiqaxr.com

Ethiqa XR (buprenorphine extended-release injectable suspension) 1.3 mg/mL
Pure Pain Relief
Get the Upper Hand in Pain Relief  ➤ NEW Ethiqa XR™

Feel the Confidence of FDA-Indexed Pharmaceutical Grade

- FDA-indexed for use in mice and rats
- Pharmaceutical grade
- FDA-reviewed efficacy and safety
  - Proven 72-hour clinical analgesia
  - Single injection, extended release
- cGMP manufacturing and sourcing compliance
- Pure, sterile components; free of endotoxins
- Simple to order with widespread availability from distributors
- Low-viscosity formulation for easy, accurate administration
- Dermal safety—no evidence of crusty injection-site lesions
- Improved animal welfare with minimal animal handling

Important Safety Information

WARNING: ABUSE POTENTIAL, LIFE-THREATENING RESPIRATORY DEPRESSION, and ACCIDENTAL EXPOSURE

Abuse Potential
This formulation contains buprenorphine, a high-concentration (1.3 mg/mL) opioid agonist and Schedule III controlled substance with an abuse potential similar to other Schedule III opioids. The high concentration may be a particular target for human abuse. Buprenorphine has opioid properties that in humans may lead to dependence of the morphine type. Abuse of buprenorphine may lead to low or moderate physical dependence or high psychological dependence. The risk of abuse by humans should be considered when storing, administering, and disposing. Persons at increased risk for opioid abuse include those with a personal or family history of substance abuse (including drug or alcohol abuse or addiction) or mental illness (suicidal depression). Because of human safety risks, this drug should be used only with veterinary supervision.

Do not dispense this formulation.

Life-Threatening Respiratory Depression
The concentration of buprenorphine is 1.3 mg/mL. Respiratory depression, including fatal cases, may occur with abuse of this formulation. There are additive CNS depressant effects when used with alcohol, other opioids, or illicit drugs that cause central nervous system depression. Because of the potential for adverse reactions associated with accidental injection, this formulation should only be administered by a veterinarian or laboratory staff trained in the handling of potent opioids.

Please see accompanying Prescribing Information for additional Important Safety Information.