

Lidocaine Transdermal Gel for Rapid Anesthesia and Site-Specific Relief of Pain

LiDOR[®], formulated and manufactured by Gensco in a FDA licensed facility, contains 3% lidocaine (30mg of lidocaine in each gram of gel) in a patented transdermal delivery system. The transdermal patented delivery system enhances the absorption of the lidocaine across the skin barrier yielding a much greater effect (topical anesthesia) than other prescription formulations including those containing 5% Lidocaine (Lidocaine Patch and Lido 5% Ointment) or Lidocaine/Prilocaine Cream, as clinically proven by the LiDOR[®] Activation Study.¹

All Gensco products, including LiDOR[®], are distributed to pharmacy chains such as Walgreens[®], CVS[®], Walmart[®], RiteAid[®], Kroger[®] and Publix[®] through the major wholesalers such as McKesson, Cardinal and AmerisourceBergen. LiDOR[®] is contracted with DAPA (Contract #SP0200-15-H-0003), Federal Supply Schedule (FSS), making it accessible to all military personnel and is also available to all MEDICARE patients (Medicare Contract #P1466).



Covered by most insurance plans!

PHONED	PROVISED	DELIVER	WILL CALL
A.M.			
P.M.			

Pat: John Doe DOB: _____
 Address: 123 Main Street
 Rx LiDORx 30ml
 Apply 1-4 pumps
 QID over 24 hours
 Maximum 16 pumps in 24 hours
 PRN Pain

PREP | TIME: _____
 M.D. DSmith M.D.
 DEANO _____

Indications

- Anesthetic for relief of pain at site of injury
- Relief of musculoskeletal pain and soreness
- Pain from neuropathy
- Local medical procedures; injections and vaccines
- Anesthetic for relief of pruritis, pruritic eczema, abrasions, minor burns, insect bites, pain, soreness and discomfort due to pruritis ani, pruritis vulvae, hemorrhoids, anal fissures and similar conditions of the skin and mucous membranes

LiDOR[®] is an effective topical anesthetic best used for minor to moderate pain relief.

LiDOR[®] can be applied as needed over 24 hours unlike the patch system that must be removed after 12 hours.

LiDORx[®] Product Information

Product Overview

LiDORx[®] contains lidocaine formulated into a patented transdermal gel designed to enhance the penetration of lidocaine through the skin into the affected tissues. Since LiDORx[®] is not a patch, it can be applied in varying amounts, within package insert guidelines, to even difficult areas including joints, back, neck, legs, and arms regardless of bony protuberances or motion. In addition, peripheral neuropathies have been shown to benefit from topical lidocaine application.²

Indications

LiDORx[®] is indicated as an anesthetic for:

- Relief of pain at site of injury
- Relief of musculoskeletal pain and soreness
- Pain from neuropathy
- Local medical procedures; injections and vaccines
- Relief of pruritis, pruritic eczema, abrasions, minor burns, insect bites, pain, soreness and discomfort due to pruritis ani, pruritis vulvae, hemorrhoids, anal fissures and similar conditions of the skin and mucous membranes

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LiDORx[®] can be applied as needed over 24 hours unlike the patch system that must be removed after 12 hours.

LiDORx[®] - Most Effective Topically Applied Transdermal Lidocaine for Local Anesthesia and Pain Relief

LiDORx[®] can be applied to multiple anatomic locations, large and small, with a dose appropriate for each site unlike the patch systems that require the patient to attempt to cut patches for each area, leading to excessive wastage. There is evidence from an open-label, nonrandomized trial that lidocaine patches were safe and effective for subacute and chronic low back pain when used daily for 6 weeks.³ Lidocaine patches are, however, limited in use for areas where there's motion and/or several anatomically challenging sites such as knees, elbows, fingers, feet, neck, shoulders, and forearms.

Patient Friendly for 24-Hour Use

LiDORx[®] can be applied to any external skin site including knees, elbows, shoulders, and fingers; sites where a patch may be unsuitable. The patient can apply a dose suitable for the area being treated, up to 4 grams per day. In addition, LiDORx[®] can be applied throughout the day and night (24 hours) as opposed to Lidocaine Patch, which is only recommended to be used for 12 hours in any 24-hour period, leaving the patient untreated for the other 12 hours.

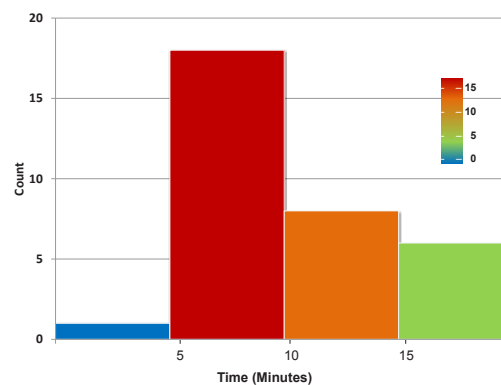
Summary of Product Research Superior Absorption

Gensco's superior transdermal delivery system, containing lidocaine at different concentrations, was tested using in vitro diffusion cells to determine absorption characteristics. The patented transdermal delivery system demonstrated an average 37.7% absorption of applied lidocaine over 6 hours in these tests using a Franz Cell method.⁴ Pharmacokinetic evaluations using animal models revealed that 74% of the total dose of lidocaine applied was detected in the plasma over 6 hours (as area under the curve).⁴ Therefore, applying the maximum daily dose of LiDORx[®] 3%, 4 grams (120 milligrams lidocaine), over a 12-hour period would result in an absorption of approximately 88.8 mg of lidocaine. Compare this to Lidoderm patches, containing 5% lidocaine (700mg lidocaine per patch), that have a documented absorption of 3% over 12 hours.⁵ Applying the maximum daily dose of Lidoderm patches, 3 patches (2,100 mg lidocaine), would only result in approximately 63 mg of lidocaine crossing the skin barrier and available for pain relief. The reason for this 40% superior absorption of LiDORx[®], while using 94% less drug, is our patented delivery system which provides for faster and greater absorption than standard lidocaine containing creams, gels, and patches.

As an illustration, standard OTC topical lidocaine formulations exhibit 1-2% absorption. EMLA cream, containing 2.5% lidocaine and 2.5% prilocaine, yields only 3.6% absorption of the lidocaine over 3 hours.⁶ Since the skin behaves as a barrier, LiDORx's superior absorption and rapid onset of anesthesia results clinically demonstrate the advantage of the Gensco patented delivery system, therefore allowing a lower concentration of Lidocaine to outperform prescription topical Lidocaine 5% products.

Rapid Onset of Anesthesia

Lidocaine is a well-known topical anesthetic in common use but, due to poor transdermal absorption characteristics, has only limited effects. LiDORx[®] is a 3% lidocaine in a transdermal gel that has been evaluated for both absorption and onset of pain relief. The enhanced absorption of lidocaine using this patented transdermal



base was demonstrated in laboratory (in vitro) testing using synthetic skin. The absorption across this membrane was measured at 37% compared to 2-3% typically seen with standard topical creams and ointments.⁴ In an additional clinical study, the onset of anesthesia using LiDORx[®] was measured in normal healthy adults.¹ Results indicate that over 55% of the subjects experienced anesthesia within 6 to 10 minutes compared to other commercially available lidocaine and combination products that can take over 60 minutes to achieve sufficient anesthesia.

The enhanced absorption characteristics of LiDORx[®] produces a fast onset of anesthesia, more rapid than typically experienced with commonly available topical prescription formulations, meaning that simply placing a drug on the skin does not enable its absorption. In one recent study, application of LiDORx[®] to the arms of healthy volunteers resulted in topical anesthesia in as little as 3-5 minutes with a median time of 10 minutes.¹ As a comparison, EMLA is recommended to be applied one hour prior to any procedure to assure sufficient anesthesia.

LiDORx[®] Regulatory Overview and Prescription Status

The Gensco FDA Facility Establishment Identifier (FEI) number is 3006374829 and NDC number is 35781. Lidocaine HCl is designated by the USFDA as Generally Recognized As Safe and Effective (GRASE). This designation is created when a drug is shown through scientific evidence to be safe and effective for its intended use. Lidocaine HCl has been shown to be effective for use as an external analgesic and anesthetic through clinical studies which have been published. These studies include those conducted by the FDA. In order to achieve GRASE, the clinical investigations must be adequate and well-controlled. Those clinical investigations must be published in scientific literature available to qualified experts. Finally, experts generally agree, based on these published studies, that the drug is safe and effective for its intended use.

Due to the rapid and enhanced absorption characteristics of LiDORx[®], the use of this product must be prescribed under the supervision of a physician to prevent over usage or inappropriate usage by the patient that could result in adverse drug reactions including systemic lidocaine toxicity.

Serious Interactions

Antiarrhythmic Drugs: LiDORx[®] 3% should be used with caution in patients receiving Class I antiarrhythmic drugs (such as tocainide and mexiletine) since the toxic effects are additive and potentially synergistic.

Bupivacaine liposome: Lidocaine Hydrochloride USP increases toxicity of Bupivacaine by increasing the free (unencapsulated) bupivacaine.

Dofetilide: Lidocaine Hydrochloride USP increases effects of dofetilide through pharmacodynamic synergism.

Lomitapide: Lidocaine Hydrochloride USP increases levels of lomitapide by affecting hepatic/intestinal enzymes CYP3A4 metabolism.

Product Summary

Gensco Pharma's LiDORx[®] provides prescribers with an alternative to current treatment regimens when prescribing for patients who need controlled relief of pain. LiDORx[®] (Lidocaine HCl USP 3%) applied in controlled doses provides relief of pain and utilizes MDose[™] Technology which dispenses an exact amount of medication (0.25 mL per pump) per application.

LiDORx[®] is indicated as an anesthetic for:

- Relief of pain at site of injury
- Relief of musculoskeletal pain and soreness
- Pain from neuropathy
- Local medical procedures; injections and vaccines
- Relief of pruritis, pruritic eczema, abrasions, minor burns, insect bites, pain, soreness and discomfort due to pruritis ani, pruritis vulvae, hemorrhoids, anal fissures and similar conditions of the skin and mucous membranes

LiDORx[®] has been proven to deliver 40% more Lidocaine in a 12-hour period than Lidocaine 5% patches. It also has been shown to have a 3-5 minute onset of anesthesia vs EMLA which requires application with an occlusive dressing for one hour prior to any procedure to assure sufficient anesthesia.

LiDORx[®] can be applied to multiple anatomic locations, large and small, with a dose appropriate for each site unlike the patch systems that require the patient to attempt to cut patches for each area, leading to excessive wastage. LiDORx[®] can be applied to most areas including joints, back, neck, legs, and arms as needed over 24-hours unlike the patch system that must be removed after 12 hours.

LiDORx[®] doesn't cause impairment and allows patients to continue their Activities of Daily Living including driving and operating equipment and should be considered as a solution for pain over opioid analgesics.

References

- 1 An Exploratory, Single-blind Study to Evaluate Both the Onset of Anesthesia of LiDORx[®] in Patients Aged 18-88 Years - Patrick Hardigan, BS, MS, PhD, Nova Southeastern University, Director of Clinical Research
- 2 Lattanzi, S and Provinciali L.: Topical Lidocaine for Localized Neuropathic Pain. Arch Neurosci. 2016 January; 3(1)
- 3 Gimbel J, Linn R, Hale M, Nicholson B: Lidocaine patch treatment in patients with low back pain: results of an open-label, nonrandomized pilot study, Am J Ther. 2005 Jul-Aug;12(4):311-9
- 4 Gensco Data on file
- 5 Lidoderm package insert
- 6 EMLA package insert

