



EMS System for Metropolitan Oklahoma City and Tulsa 2025 Medical Control Board Treatment Protocols



Approved 9/04/24, Effective 1/15/25, replaces all prior versions

16Z – LIDOCAINE 2% INTRAVASCULAR (XYLOCAINE®)

EMT-INTERMEDIATE 85

ADVANCED EMT

PARAMEDIC

Intraosseous local anesthetic use only - 9I

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Class: Intraosseous Local Anesthetic & Antidysrhythmic

Therapeutic Actions/Pharmacodynamics: As a local anesthetic, reduces nerve activation that carries painful stimulus from intraosseous fluid and/or medication administration. As an antidysrhythmic, suppresses ventricular automaticity, chemically converting ventricular tachycardia.

Indications: Tachycardia - Stable (5F)
Wide complex tachycardia, refractory to amiodarone
****OLMC Order Only**
Vascular Access - Intraosseous (9I)

Contraindications: Narrow complex tachycardia
Second degree AV Block-Type II (Classic Type)
Third degree AV Block (Complete Heart Block)
Premature ventricular contractions with underlying bradycardias
No indication for IO anesthetic (unresponsive patients)

Pharmacokinetics: Onset of action within 3 minutes IVP/IOP. Duration for 10-20 minutes.

Side Effects: None expected in indicated dosing. Erroneous use in high degree heart blocks can lead to complete ventricular suppression/cardiac arrest.

Dosage: Tachycardia - Stable - Wide Complex Tachycardia - Adult (5F)
Refractory to Amiodarone
Up to 1 mg/kg, slow IVP/IOP at < 50 mg/minute
****OLMC Order Only**

Tachycardia - Stable - Pediatric (5F)
Consult with OLMCP for use and dosing.

Vascular Access - Intraosseous (Local Anesthetic) - Adult & Pediatric (9I)
1 mg/kg up to 40 mg IOP

How Supplied: 100 mg/5 mL (20 mg/mL of 2% lidocaine) prefilled syringe.
(Always check concentration and dose per container at time of patient medication administration)