Antiarrhythmic treatment
An intravenous dose of 1 mg/kg may be given over 2 minutes and repeated after 5 minutes but giving an infusion of 2-4 mg/min to produce a plasma level of 2-4 mg. To avoid a long delay in achieving a steady state, a loading dose of approximately 1 mg/kg-1 is usually given intravenously over 2 minutes at the outset.

CONTRAINDICATION
Known hypersensitivity to anaesthetics of the amide type.

DRUG INTERACTIONS
Cimetidine can impair the metabolism of lidocaine absorbed into the circulation. Elimination will be delayed and the risk of adverse reactions increased. Singificant increases in plasma-lidocaine concentration have occurred during concomitant therapy with beta blockers such as propranolol, metoprolol. It prolongs the duration of action of suxametonium.

SIDE EFFECTS/ADVERSE REACTIONS
In common with other local anaesthetics, adverse reactions to lidocaine are rare and are usually the result of excessively high blood concentrations due to inadvertent intravascular injection, excessive dosage, rapid absorption occasionally hypersensitivity, idiosyncracy or diminished tolerance on the part of the patient. In such circumstances systemic effects occur involving the central nervous system and/or depressant and may be characterized by nervousness, dizziness, blurred vision and tremors, followed by drowsiness, convulsions, unconsciousness and possibly respiratory arrest. cardiovascular reactions are hypotension, myocardial depression, bradycardia and possibly cardiac arrest. Allergic reactions are extremely rare. They may be characterized by cutaneous lesions, urticaria, oedema or anaphylactic reactions.

PRECAUTIONS
Lidocaine for infiltration and nerve block should be employed only by clinicians who are well versed in diagnosis and management of dose-related toxicity. The safety and effectiveness of lidocaine depends on proper dosage, correct technique, adequate precautions and readiness for emergencies. Standard text books should be consulted for specific techniques and precautions for various regional anaesthetic procedures. Resuscitative equipment, oxygen and other resuscitative drugs should be available for immediate use. It should be used cautiously in patients with epilepsy, impaired cardiac conduction, bradycardia, impaired respiratory function and in patients with impaired hepatic function, if the dose or site of administration is likely to result in high blood levels. The effect of local anaesthetics may be reduced if an injection is made into an inflamed of infected area. Repeated doses of lidocaine may cause significant increases in blood levels with each repeated dose because of slow accumulation of the drug or its metabolites. Tolerance to elevated blood levels varies with the status of the patient. Careful and constant monitoring of cardiovascular and respiratory vital signs and the patient's state of consciousness should be accomplished after each local anaesthetic injection.

USE IN PREGNANCY AND LACTATION
Although there is no evidence from animal studies of harm to the foetus, as with all drugs. It should not be given during early pregnancy unless the benefits are considered to outweigh the risks. Caution should be exercised when it is administered to a nursing woman.

USE IN CHILDREN
Dosages in children should be reduced, commensurate with age, body-weight and physical condition.

STORAGE
Store below 25°C in a dry place, away from light. Keep out of the reach of children.

PACKAGING
Z-LIDOCAINE Injection 2% : 50 mL vial in unit box.

Manufactured by
ZISKA PHARMA **Ziska Pharmaceuticals Ltd.**
Gazipur, Bangladesh

Z-LIDOCAINE

2%
Lidocaine HCl
USP Injection

COMPOSITION
Z-LIDOCAINE Injection 2% : Each mL contains Lidocaine Hydrochloride USP 20 mg.

DESCRIPTION
Z-LIDOCAINE is a sterile, non-pyrogenic, aqueous solution which contains Lidocaine Hydrochloride. It is a local anaesthetic of the amide type and has a fast onset and an intermediate duration of action. The onset of action ranges from 5 minutes for infiltration anaesthesia to 20 minutes for regional anaesthesia. The duration of action is approximately 1 hour. Lidocaine stabilizes the neuronal membrane by inhibiting the ionic fluxes required for the initiation and conduction of impulses, there by effecting local anaesthetic action.

INDICATIONS
- As a local anaesthetic for use in infiltration blockade and intravenous regional analgesia.
- For the prevention and treatment of vetricular tachyarrhythmias.

DOSAGE AND ADMINISTRATION
In estimating the safe dosage of this drug, it is important to take account of the rate at which it is absorbed and excreted as well as its potency. The patient's age, weight, physique and clinical condition, the degree of vascularity of the area to which the drug is to be applied and the durationof administration are other factors which must be taken into account. The dosage is adjusted according to the response of the patient and site of administration. The lowest concentration and smallest dose producing the required effect should be given.

Local anaesthesia
Adult :
For healthy adults, the maximum individual should not exceed 4.5 mg/kg of body weight and in general it is recommended that the maximum total dose not exceed 300 mg.
Recommended doses given in the following table serve only as a guide to the amount of anaesthetic required for most routine porcedures.

Recommended Dosages

Procedures	Total Dose (mg)
Infiltration	
Percutaneous	5 - 300
Intravenous	50 - 300
Peripheral Nerve Blocks, e.g.	
Brachial	225 - 300
Dental	20 - 100
Intercostal	30
Paravertebral	30 - 50
Pudendal (each side)	100
Paracervical	
Obstetrical analgesia (each side)	100
Sympathetic Nerve Blocks, e.g.	
Cervical (stellate ganglion)	50
Lumbar	50 - 100
Central Neural Blocks	
Epidural*	200 - 300
Thoracic	200 - 300
Lumbar	
Analgesia	250 - 300
Anesthesia	200 - 300
Caudal	
Obstetrical analgesia	200 - 300
Surgical anesthesia	250 - 300

Dose determined by number of dermatomes to be anesthetized (2-3 ml/dermatome). Children and eldely or debilitated patients require smaller doses, commensurate with age and physical status.