1. NAME OF THE DRUG PRODUCT

KINVOX (LEVOFLOXACIN TABLETS USP 500 MG)

Composition
Each Film coated tablet contains:
Levofloxacin Hemihydrate USP
Equivalent to Levofloxacin 500 mg
Excipients…..... Q.S.
Color: Titanium Dioxide BP

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Ingredients	Qty./ Tab In mg	Use/Function
*Levofloxacin Hemihydrate USP	512.500	Active material
#$Starch BP	49.00	Diluent
Micro Crystalline Cellulose 101 BP	48.00	Diluent
Cross Povidone XL-10 BP	7.500	Disintegrant / Diluent
Colloidal Silicon Dioxide (Aerosil) BP	3.00	Disintegrant
Starch BP	30.00	Binding agent
Talcum Powder BP	10.00	Glidant
Sodium Starch Glycolate BP	15.00	Disintegrant
Croscarmellose Sodium BP	15.00	Disintegrant
Colloidal Silicon Dioxide (Aerosil) BP	10.00	Glidant
Magnesium Stearate BP	10.00	Lubricant
Total Material Weight Of Uncoated Tablet : 710.00 mg		
Titanium Dioxide BP	20.00	Coating agent
Iso Propyl Alcohol BP	--	Solvent
Dichloromethan(Methylene Chloridie) BP	--	Solvent
Weight of film coated Tablets: 730.00 mg		

* Quantity to be changed based on potency of API.
# Quantity of starch is to be adjusted to keep the total mass.
$ Quantity shall be compensated based on Moisture Content
BP = British Pharmacopoeia
USP = United States Pharmacopeia

3. PHARMACEUTICAL FORM
Film-coated tablets

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

KINVOX is indicated for the treatment of mild, moderate and severe infections caused by susceptible strains of micro-organisms like Staphylococcus aureus, Pseudomonas aeruginosa, Serratia marcescens, Escherichia coli, Klebsiella pneumoniae, Haemophilus influenzae, or Streptococcus pneumoniae.

4.2 Posology/Dosage and method of administration

KINVOX Tablets are administered once or twice daily. The dosage depends on the type and severity of the infection and the sensitivity of the presumed causative pathogen.

Dosage:

Indication	Daily dose regimen	Duration of treatment
Acute bacterial sinusitis	500 mg once daily	10 - 14 days
Acute bacterial exacerbations of chronic bronchitis	500 mg once daily	7 - 10 days
Community-acquired pneumonia	500 mg once or twice daily	7 - 14 days
Pyelonephritis	500 mg once daily	7 - 10 days
Complicated urinary tract infections	500 mg once daily	7 - 14 days
Uncomplicated cystitis	250 mg once daily	3 days
Chronic bacterial prostatitis	500 mg once daily	28 days
Complicated Skin and soft tissue infections	500 mg once or twice daily	7 - 14 days
Inhalation Anthrax	500 mg once daily	8 weeks

As directed by physician.

Method of Administration

For oral administration

4.3 Contraindications

KINVOX is contraindicated in patients with known hypersensitivity to Levofloxacin, other quinolon compounds or any components of KINVOX.

4.4 Special warnings and precautions for use

Patients with renal impairment

Since levofloxacin is excreted mainly by the kidneys, the dose of Levofloxacin Tablets should be adjusted in patients with renal impairment.

Hypersensitivity reactions

Levofloxacin can cause serious, potentially fatal hypersensitivity reactions (e.g. angioedema up to anaphylactic shock), occasionally following the initial dose. Patients should discontinue treatment immediately.

Severe bullous reactions

Cases of severe bullous skin reactions such as Stevens-Johnson syndrome or toxic epidermal necrolysis have been reported with levofloxacin. Patients should be advised to contact their doctor immediately prior to continuing treatment if skin and/or mucosal reactions occur.

Dysglycaemia As with all quinolones, disturbances in blood glucose, including both hypoglycaemia and hyperglycaemia have been reported, usually in diabetic patients receiving concomitant treatment with an oral hypoglycaemic agent (e.g., glibenclamide) or with insulin. Cases of hypoglycaemic coma have been reported. In diabetic patients, careful monitoring of blood glucose is recommended

4.5 Interaction with other drug products and other forms of interaction
KINVOX interact with the following drugs:
Iron salts, magnesium – or aluminium –containing antacids, didanosine, Theophylline, fenbufen or similar non-steroidal anti-inflammatory drugs, Probenecid and cimetidine

4.6 Fertility, pregnancy and lactation

PREGNANCY
Animal studies do not indicate direct or indirect harmful effects with respect to reproductive toxicity. However in the absence of human data and due to that experimental data suggest a risk of damage by fluoroquinolones to the weight-bearing cartilage of the growing organism, levofloxacin must not be used in pregnant women.
LACTATION
Levofloxacin tablets are contraindicated in breast-feeding women. Levofloxacin must not be used in breast-feeding women.

4.7 Effects on ability to drive and use machines
Certain undesirable effects (e.g. dizziness / vertigo, drowsiness, visual disturbances) may impair the patient's ability to concentrate and react, and therefore may constitute a risk in situations where these abilities are of special importance (e.g. driving a car or operating machinery).

4.8 Undesirable effects
Dysglycemia: As with all quinolones, disturbances in blood glucose, including both hypoglycaemia and hyperglycaemia have been reported, usually in diabetic patients receiving concomitant treatment with an oral hypoglycaemic agent (e.g., glibenclamide) or with insulin. Careful monitoring of blood glucose is recommended.
Nervous system Disorders: Headache, Dizziness
Gastro-intestinal Disorders: Nausea, vomiting, diarrhoea
Renal and Urinary Disorders: Since levofloxacin is excreted mainly by the kidneys, the dose of Levofloxacin Tablets should be adjusted in patients with renal impairment.

4.9 Overdose
According to toxicity studies in animals or clinical pharmacology studies performed with supra-therapeutic doses, the most important signs to be expected following acute overdosage of levofloxacin are central nervous system symptoms such as confusion, dizziness, impairment of consciousness, and convulsive seizures, increases in QT interval as well as gastro-intestinal reactions such as nausea and mucosal erosions.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamics properties

Pharmacotherapeutic group: Quinolone antibacterials-Fluroquinolone
ATC code: J01MA12
KINVOX (Levofloxacin) is a synthetic antibacterial agent of the fluoroquinolone class and is the S (-) enantiomer of the racemic drug substance ofloxacin. As a fluoroquinolone antibacterial agent, levofloxacin acts on the DNA-DNA-gyrase complex and topoisomerase IV.

5.2 Pharmacokinetic properties

Absorption

Orally administered levofloxacin is rapidly and almost completely absorbed with peak plasma concentrations being obtained within 1- 2 h. The absolute bioavailability is 99- 100 %.Food has little effect on the absorption of levofloxacin.

Steady state conditions are reached within 48 hours following a 500 mg once or twice daily dosage regimen

Distribution

Approximately 30 - 40 % of levofloxacin is bound to serum protein. The mean volume of distribution of levofloxacin is approximately 100 l after single and repeated 500 mg doses, indicating widespread distribution into body tissues.

Metabolism

Levofloxacin is metabolised to a very small extent, the metabolites being desmethyl-levofloxacin and levofloxacin N-oxide. These metabolites account for < 5 % of the dose excreted in urine. Levofloxacin is stereochemically stable and does not undergo chiral inversion.

Excretion

Following oral and intravenous administration of levofloxacin, it is eliminated relatively slowly from the plasma (t½: 6 - 8 h). Excretion is primarily by the renal route > 85 % of the administered dose).

The mean apparent total body clearance of levofloxacin following a 500 mg single dose was 175 +/-29.2 ml/min.

5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional studies of single dose toxicity, repeated dose toxicity, carcinogenic potential and toxicity to reproduction and development. Levofloxacin caused no impairment of fertility or reproductive performance in rats and its only effect on fetuses was delayed maturation as a result of maternal toxicity. Levofloxacin did not induce gene mutations in bacterial or mammalian cells but did induce chromosome aberrations in Chinese hamster lung cells in vitro. These effects can be attributed to inhibition of topoisomerase II. In vivo tests (micronucleus, sister chromatid exchange, unscheduled DNA synthesis, dominant lethal tests) did not show any genotoxic potential. Studies in the mouse showed levofloxacin to have phototoxic activity only at very high doses. Levofloxacin did not show any genotoxic potential in a photomutagenicity assay, and it reduced tumour development in a photocarcinogenity study. As with other fluoroquinolones, levofloxacin showed effects on cartilage (blistering and cavities) in rats and dogs. These findings were more marked in young animals.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sr. no.	Name of Excipients	Function
1.	Starch	BP
2.	Micro Crystalline Cellulose 101	BP
3.	Cross Povidone XL-10	BP
4.	Colloidal Silicon Dioxide	BP
5.	Talcum Powder	BP

6.	Sodium Starch Glycolate	BP
7.	Croscarmellose Sodium	BP
8.	Magnesium Stearate	BP
9.	Titanium Dioxide	BP
10.	Iso Propyl Alcohol	BP
11.	Dichloromethan(Methylene Chloridie)	BP

6.2 Incompatibilities
None

6.3 Shelf life
36 months

6.4 Special precautions for storage
Keep in cool & Dry place, below 30°C. Protect from light.
KEEP OUT OF REACH OF CHILDREN.

6.5 Nature and contents of container
2 X 7 ALU ALU BLISTER PACK

6.6 Special precautions for disposal and other handling
KEEP OUT OF THE REACH AND SIGHT OF CHILDREN.

7. APPLICANT/MANUFACTURER

Applicant:
KINGZY PHARMACEUTICALS LTD.,
NO 100 EAST-WEST ROAD,
RUMUODARA PHC, RIVERS STATE
NIGERIA

Exported by:
ROENTGEN IMPEX
NO. 2063/A, RABARI VAS, KHORAJ VILLAGE,
DIST. GANDHINAGAR-382735, GUJARAT, INDIA

Manufactured by:
Naxcure Healthcare Pvt. Ltd.
SURVEY NO.-889/1,B/H CHADASANA ONGC,
CHADASANA-JHULASAN ROAD, AT & POST.- JHULASAN,
TA.- KADI, DIST.- MEHSANA-382705
GUJARAT, INDIA