Levofloxacin Injection in 5% dextrose is indicated for the treatment of adults (≥18 years old) and children 6 months of age and older. Efficacy studies of levofloxacin are limited to patients with lower respiratory tract infections (LRTI), skin and skin structure infections (SSSI), and bacterial urinary tract infections (UTI) caused by susceptible strains of bacteria.

The usual dose of Levofloxacin Injection is 250 mg or 500 mg administered by slow infusion over 5 to 10 minutes. The dose should be adjusted based on the patient's age and kidney function. For patients with creatinine clearance (Ccr) <50 mL/min, the dose should be reduced. For patients on dialysis, the dose should be adjusted accordingly. The usual duration of treatment is 3 to 10 days, depending on the infection.

To reduce the development of drug-resistant bacteria and maintain the effectiveness of fluoroquinolones, including Levofloxacin Injection in 5% dextrose, these drugs should be used only to treat infections that are proven or strongly suspected to be caused by bacteria sensitive to fluoroquinolones. These drugs should not be used for the treatment of viral infections.

Levofloxacin is a fluoroquinolone antibiotic available as a sterile, ready-to-use solution for injection. It is indicated for the treatment of a wide range of bacterial infections, including those caused by methicillin-susceptible Staphylococcus aureus (MSSA), methicillin-resistant Staphylococcus aureus (MRSA), and a variety of gram-negative bacteria.

In clinical studies, Levofloxacin has been shown to be effective in the treatment of community-acquired pneumonia, skin and skin structure infections, and urinary tract infections. It has been associated with rare but serious side effects, including tendinitis and tendon rupture, which can occur with all fluoroquinolones.

Levofloxacin is metabolized primarily by the liver and excreted predominantly in urine. It is available in compendial strengths of 250 mg and 500 mg per 100 mL solution. The product code is ACSI098I00. For more information, see the package insert provided by the manufacturer.
Drug-Drug Interactions

Levofloxacin has been shown to be active against most isolates of the following bacteria both in vitro and in vivo:

- Haemophilus parainfluenzae
- Haemophilus influenzae
- Moraxella catarrhalis
- Moraxella catarrhalis
- Pasteurella pneumotropica
- Neisseria meningitidis
- Neisseria gonorrhoeae
- Proteus mirabilis
- Providencia stuartii
- Klebsiella oxytoca
- Escherichia coli
- Enterobacter cloacae
- Acinetobacter baumannii
- Staphylococcus aureus
- Staphylococcus epidermidis
- Enterococcus faecalis
- Enterococcus faecium

The blister fluid to plasma AUC ratio is approximately 1 following multiple once-daily oral doses of levofloxacin. Hemodialysis reduces the peak plasma concentration by approximately 50% after a single intravenous dose of levofloxacin to healthy volunteers. The mean ± SD peak plasma concentration is 13.2 ± 7.7 mcg/mL for a 500 mg intravenous dose. The mean ± SD peak plasma concentration for oral administration of levofloxacin is 5.3 ± 3.3 mcg/mL for a 500 mg dose. The lower limit of quantification for the above-mentioned analyses was approximately 2 mcg/mL for plasma concentrations by liquid chromatography/mass spectrometry.