**RESULTS & DISCUSSION**

**Comparative In Vivo Efficacy of WCK 771 A & other FQs**

<table>
<thead>
<tr>
<th>FQs</th>
<th>ED₅₀ (mg/kg)</th>
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<tbody>
<tr>
<td>Cipro</td>
<td>18 - 75</td>
</tr>
<tr>
<td>Levo</td>
<td>8.74 - 27.3</td>
</tr>
<tr>
<td>Moxi</td>
<td>4.8 - 28.9</td>
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**In vitro evaluation**

- Comparative in vitro efficacy of WCK 771 A, Cipro, Levo, and Moxi was studied in murine septicemia infection (i.p.) caused by the 5 strains of *Staphylococcus aureus* of varied sensitivity and resistance pattern. Treatment was given 18, 1, 6, and 24 hours post-infection (3 days for sepsis 3 strain) by oral route and additionally by i.p. for STP 731, STP 733, and STP 727 in which Levo and Cipro were used as comparators. Mortality was monitored up to 10 days. ED₅₀ values were determined by probit analysis. Each experiment was repeated at least twice. Results in terms of ED₅₀ and ED₅₀ for all the 5 infective strains are shown in Figs. 2 to 9.

**In vivo lung load reduction model**

- A group of 15 immunocompetent mice weighing 18-22 g were infected with *S. pneumoniae* 3030 (type 3) by i.p. route. One day and four days post infection treatment were given orally at a dose of 75 and 100 mg/kg BID X 2 day for both, WCK 771 A and Levo. Twenty four hours after last dose animal were sacrificed. Lungs were removed and homogenised in 5 ml of chilled saline. Viability count in lungs was determined in terms of lung load per animal. The percentage of animals showing sterile lungs (at least 10 CFU/ml) was calculated for WCK 771 A and Levo and is represented in graphical form (Fig. 10).

**CONCLUSIONS**

- WCK 771 A shows enhanced cidal activity against *S. pneumoniae* compared to levofloxacin.
- WCK 771 A is efficacious against a variety of systemic mouse infections due to pneumococci ED₅₀/ED₅₀ doses of WCK 771 A are comparable to levofloxacin by oral and i.p. routes.
- In vivo efficacy of WCK 771 A in terms of eradication of pneumococcal infection from lung is comparable to Levo.
- WCK 771 A appears to have good potential in treatment of pneumococcal infections.

**REFERENCES**
