

Effective Oral Combination Treatment for Extended-Spectrum Beta-Lactamase-Producing *Escherichia coli* (ESBL-EC).

Al-Tamimi M, et al. Microb Drug Resist. 2019 Oct; 25(8):1132-1141.

- ESBL-EC is increasing worldwide. This study evaluated *in vitro* and *in vivo* efficacy of a combination of cephalosporins and amoxicillin/clavulanate in treatment of ESBL-EC.
- Combination treatment was assessed *in vivo* on 20 patients having urinary tract infection (UTI) due to ESBL-EC.
- Addition of amoxicillin/clavulanate enhanced the susceptibility rate with cefixime from 8.6% to 86.3%, significantly higher than with other cephalosporins.
- Cefixime and amoxicillin/clavulanate synergy was not affected by age, gender, hospital, department, sample type, or bacterial load.

Eighteen of 20 ESBL-EC-positive UTI patients (90%) had a positive *in vitro* synergy test and complete clinical and microbiological resolution after completion of cefixime and amoxicillin/clavulanate oral treatment; combination therapy could be an effective oral outpatient treatment option for ESBL-EC.