Immunomodulatory Effects of Levofloxacin on Patients with Pneumonia Badari MS, et al. *Egypt J Immunol*. 2015;22(1):79-85.

- Immunomodulatory effects of antibiotics could influence the degree of systemic and local responses to infection
 - Fluoroquinolones are known to exert modulatory activity on immune responses to microbial infection. However the mechanism has not been well documented.
- Immunomodulatory effects of levofloxacin were assessed on concentrations of the pro-inflammatory cytokine tumor necrosis factor α (TNF- α) and the anti-inflammatory cytokine Interleukin 10 (IL-10) in serum of 40 pneumonic patients.
- Levofloxacin significantly decreased mean levels of TNF- α and IL-10.

Levofloxacin exerts an IMMUNOMODULATORY effect in patients with pneumonia

<u>This may provide additional benefits in treatment of respiratory tract infections, independent of its antibacterial properties.</u>