Roxithromycin is a semi-synthetic macrolide antibiotic that exhibits anti-inflammatory, anti-asthma, vasodilatory, antibacterial, and anti-arthritic activities; it binds to the 50S ribosome, inhibiting protein synthesis. In animal models of ovalbumin-induced asthma, roxithromycin decreases the number of inflammatory cells and airway hyperresponsiveness and suppresses levels of IgE, inflammatory cytokines, and activated NF-κB. Roxithromycin also induces vascular relaxation ex vivo in arteries and thoracic aorta segments. In macrophages, this compound inhibits T cell production of TNF-α and IL-6; in animal models of arthritis, it inhibits T cell migration and decreases disease severity.

References


