



Activated neutrophils infiltrating into tissue release a variety of inflammatory cytokines and reactive oxygen species, leading to tissue injury.

Activated neutrophils are implicated in the development of ischemia/reperfusion (I/R)-induced renal failure. JTE-607, an *N*-benzoyl-L-phenylalanine-derived compound, is a multi-cytokine inhibitor that strongly suppresses the production of proinflammatory cytokines. JTE-607 reduced renal dysfunction and histopathologic changes in the kidneys of rats subjected to renal I/R by inhibiting neutrophil activation.

Figures are shown for rats in the sham group (upper left), rats treated with I/R plus saline (lower left), and rats treated JTE-607 prior to I/R (right).

Related article: Asaga, T., Ueki, M., Chujo, K., and Taie, S. J., "**JTE-607, an inflammatory cytokine synthesis inhibitor, attenuates ischemia/reperfusion-induced renal injury by reducing neutrophil activation in rats**", [J. Biosci. Bioeng., vol. 106, 22-26 \(2008\)](#).