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Suppression of NLRP3 inflammasome by ivermectin ameliorates bleomycin-induced pulmonary fibrosis

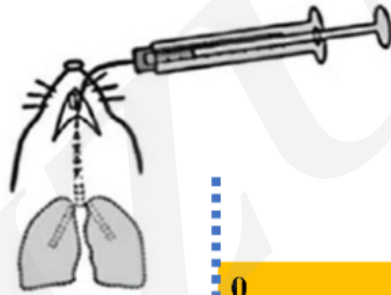
Keywords: Intratracheal instillation, Immunohistochemical, TGF- β 1, NF- κ B, Antifibrotic.

Research Aim and Methods

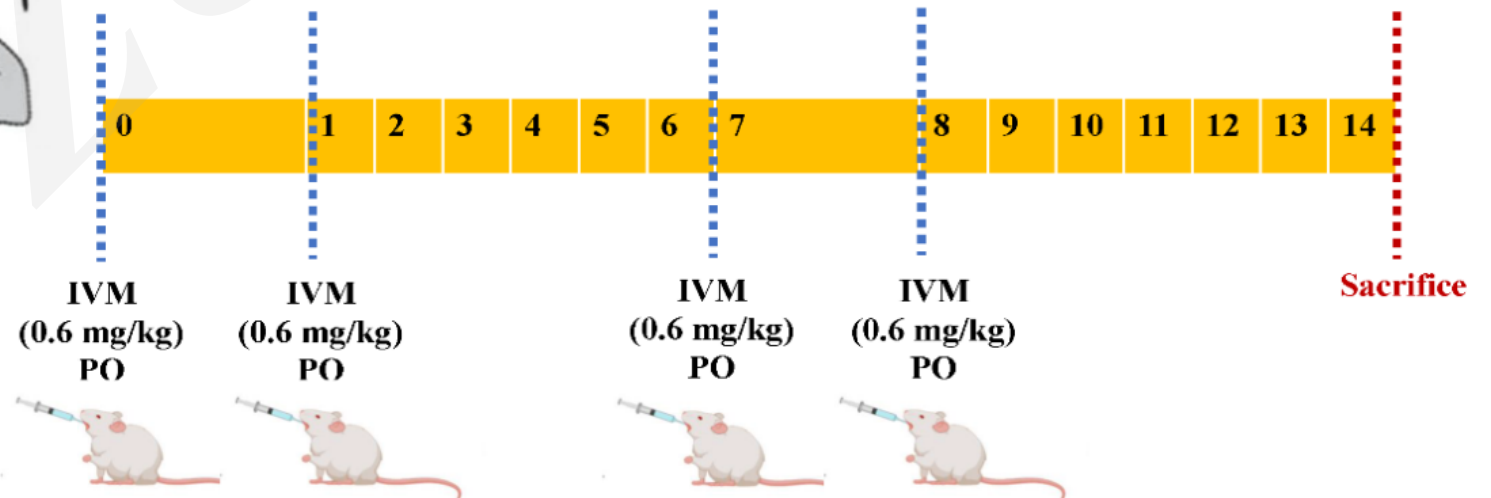


Our study aimed to explore the ability of ivermectin (0.6 mg/kg) to alleviate bleomycin-induced biochemical derangements and histological changes in an experimental PF rat model. This can provide the means to validate the clinical utility of ivermectin as a treatment option for idiopathic pulmonary fibrosis

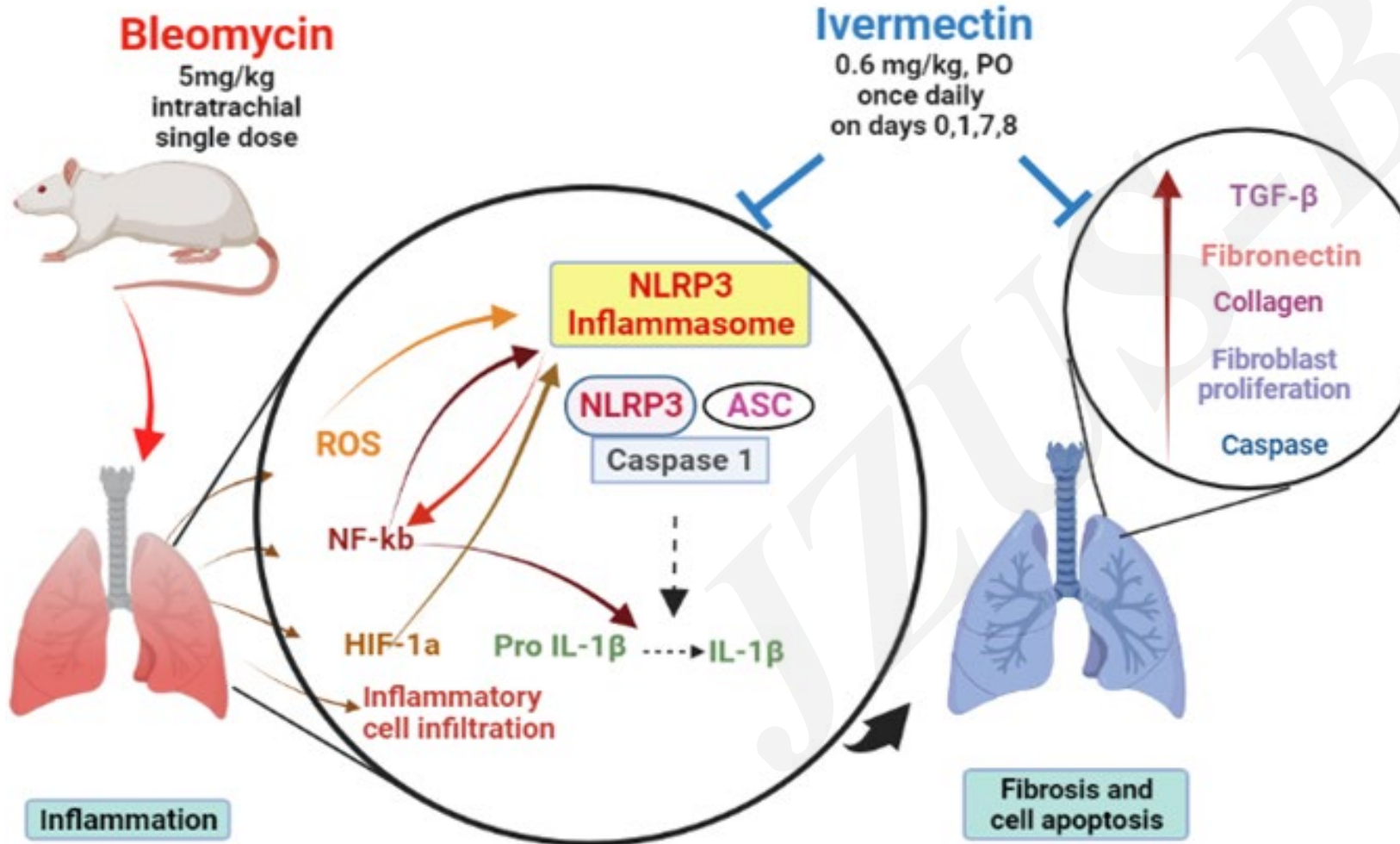
Intra-tracheal instillation
5 mg bleomycin/kg



methods



Research Summary and Key points



HIF-1 α regulates NLRP3 activation through NF- κ B signaling in acute lung damage

Ivermectin ameliorates pulmonary inflammation and fibrosis through modulating HIF-1 α

Ivermectin suppresses the NLRP3 inflammasome with subsequent decline in interleukin-1 β

Ivermectin inhibits NF- κ B and HIF-1 α along with oxidative and apoptotic markers