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(54) **Title**: COMPOSITIONS AND METHODS FOR TREATING LUNG DISEASE AND INJURY

(57) **Abstract**: Disclosed herein are therapeutic methods for treating lung diseases, disorders and injury in a mammal, including treatment of acute respiratory distress syndrome (ARDS), acute lung injury, pulmonary fibrosis (idiopathic), bleomycin induced pulmonary fibrosis, mechanical ventilator induced lung injury, chronic obstructive pulmonary disease (COPD), chronic bronchitis, emphysema, bronchiolitis obliterans after lung transplantation and lung transplantation-induced acute graft dysfunction, including treatment, prevention or prevention of progression of primary graft failure, ischemia-reperfusion injury, reperfusion injury, reperfusion edema, allograft dysfunction, pulmonary reimplantation response, bronchiolitis obliterans after lung transplantation and/or primary graft dysfunction (PGD) after organ transplantation, in particular in lung transplantation, comprising down-regulating the TLR2 gene or both the TLR2 gene and TLR4 gene. Provided herein are compositions, methods and kits for treating lung diseases, disorders and injury.