**Title:** Hepatocyte growth factor (HGF) expression in bronchoalveolar lower (BAL) does not confirm its anti-fibrotic activity in interstitial lung diseases (ILD)

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**Body:** Background: We have previously shown that BAL-derived T cells secrete HGF, regarded as a potent anti-fibrotic cytokine, antagonist of TGFβ, and the promising tool for experimental therapies in lung fibrosis. However, our preliminary results concerning HGF expression in ILD lower airways were not convergent.

Methods: HGF concentration in BAL fluid from pulmonary sarcoidosis (PS), idiopathic pulmonary fibrosis (IPF), extrinsic allergic alveolitis, nonspecific interstitial pneumonia (NSIP), BOOP and eosinophilic pneumonia (n=48, 20, 7, 13, 7, 6 resp.) was assessed by ELISA method. BAL cells were analyzed for intracellular HGF by flow cytometry. Results: HGF concentration was significantly increased in IPF nonsmokers (317±136 pg/ml vs 148±17 in controls, p<0,02, median±SEM), IPF smokers (215±12 vs 141±10, p<0,001) and in smokers with advanced PS. A trend towards increased HGF levels in NSIP and BOOP was observed. HGF concentration was strongly negatively correlated with pulmonary function ((VC% pred) and positively, inter alia, with BAL neutrophil and eosinophil relative count as well as with TGFβ levels. Systemic steroid therapy resulted in decline of HGF expression in respective IPF, NSIP and PS subgroups. Conclusions: Our data seem to disagree with the previously suggested HGF strong antifibrotic activity. Its high expression was paradoxically observed in ILD patients with severe lung fibrosis Still, our observations might reflect the up-regulated TGF enhanced expression aimed at sustaining lung homeostasis.