

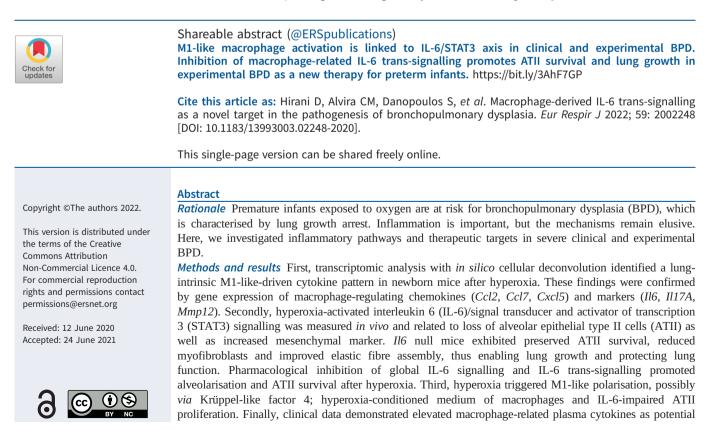


## Macrophage-derived IL-6 trans-signalling as a novel target in the pathogenesis of bronchopulmonary dysplasia

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biomarkers that identify infants receiving oxygen at increased risk of developing BPD. Moreover, macrophage-derived *IL6* and active STAT3 were related to loss of epithelial cells in BPD lungs.

*Conclusion* We present a novel IL-6-mediated mechanism by which hyperoxia activates macrophages in immature lungs, impairs ATII homeostasis and disrupts elastic fibre formation, thereby inhibiting lung growth. The data provide evidence that IL-6 trans-signalling could offer an innovative pharmacological target to enable lung growth in severe neonatal chronic lung disease.