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## Oxidative Stress and Bronchopulmonary Dysplasia

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**Abstract**

With the progress of modern medicine, oxygen therapy has become a crucial measure for the treatment of premature infants. As an environmental stimulus, in the normal development of lungs, oxygen plays a very important regulatory role. However, the problem is that long-term exposure to hyperoxia can interfere with the development of lungs, leading to irreversible developmental abnormalities. Now, the incidence of bronchopulmonary dysplasia (BPD) is increasing year by year. The existing related research shows that although BPD is a multi-factor triggered disease, its main risk factors are the premature exposure to hyperoxia and the role of reactive oxygen species(ROS). As for premature infants, especially very premature babies and those with very low birth weight, prolonged exposure to high oxygen can affect and alter the normal developmental trajectories of lung tissue and vascular beds, triggering developmental

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