## RISK FACTORS OF SEVERE RESPIRATORY SYNCYTIAL VIRUS (RSV) INFECTION COURSE IN HOSPITALIZED CHILDREN

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**Background:**RSV often leads to hospitalization and precise knowledge onrisk factors is crucial.

**Methods:** We retrospectively analysed laboratory-confirmed RSV hospitalizations in terms ofpregnancy factors, birth status, cigarette smoke exposure, social conditions, feeding, clinical presentation andsevere disease defined as passive oxygen therapy($pO_2Tx$), respiratory failure, intensive care unit (ICU) transfer, presence of pneumonia, and antibiotic treatment.

**Results:** A univariate analysis included 594 children (median age 4 months) andrevealed $pO_2Tx$ relationship with prematurity (OR=1.69), smoke exposure during pregnancy (OR=2.41), being born during RSV season (OR=1.72), aged<3months(OR=1.56), andpresence of apnea (OR=5.81). Respiratory failure was related with age<3months(OR = 7.79), prematurity (OR = 3.86), and apnea (OR = 18.78), while ICU transfer with age<3months (OR=8.37), prematurity(OR=3.42), and apnea (OR=17.18). Pneumonia was related with maternal smoke exposure (OR=5.01), fever (OR=1.90), history of aspiration (OR=4.63), and inversely with age<3months (OR=0.45), whereas antibiotics were related with maternal smoke exposure (OR=4.13), household crowding (OR=1.61), fever (OR=2.43), aspiration (OR=8.44), presence of complications (OR=63.03), and inversely with age under 3mo(OR=0.37), birth during infection season (OR=0.51),rhinitis (OR=0.61).

**Conclusions:** Prematurity, smoke exposure, and young age are significant independent risk factors of severe RSV course, and a special attention should be paid to apnea.