

# Increased expression of the glucocorticoid receptor ? in infants with RSV bronchiolitis

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**OBJECTIVES:** The majority of studies on glucocorticoid treatment in respiratory syncytial virus (RSV) bronchiolitis concluded that there are no beneficial effects. We hypothesized that RSV-infected patients may have an increased glucocorticoid receptor (GR) ? expression, the isoform that is unable to bind cortisol and exert an antiinflammatory action. **METHODS:** By using real-time polymerase chain reaction, we studied the expression of ? and ? GR in the peripheral blood mononuclear cells obtained from 49 RSV-infected infants (<1 year of age) with severe (n = 29) and mild to moderate (n = 20) illness. In plasma, we analyzed the level of cortisol by radioimmunoassay and inflammatory cytokines interleukin (IL)-10, IL-6, tumor necrosis factor-?, IL-1?, IL-8, IL-12p70, IL-2, IL-4, IL-5, interferon-g, and IL-17 by cytometric beads assay. Statistical analysis was performed by nonparametric analysis of variance. **RESULTS:** We found a significant increase of ? GR expression in patients with severe i