

## **Granulocyte colony-stimulating factor potential use in the treatment of children with cerebral palsy**

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### **ABSTRACT**

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Granulocyte colony-stimulating factor (G-CSF) is a glycoprotein that stimulates the bone marrow to produce granulocytes and stem cells and release them into the blood. Recent studies demonstrated the presence of CSF-receptor (G-CSFR) system in the brain and spinal cord, and their roles in neuroprotection and neural tissue repair, as well as improvement in functional

recovery. G-CSF exerts neuroprotective actions through the inhibition of apoptosis and inflammation, and the stimulation of neurogenesis. This review highlights recent studies on the potential use of G-CSF in cerebral palsy.

**Keywords:** Granulocyte colony-stimulating factor, neuroprotection, studies, cerebral palsy

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