

Innovative Non-Traditional Therapy Information Sheet

Filgrastim (Generic Neupogen)

FDA Orphan Drug Approval for ALS

Neurodegenerative	Functional	Recommended
ALS		✓

What is Filgrastim?

Filgrastim, also known by its brand name Neupogen, is a medication originally designed to stimulate the production of white blood cells in patients undergoing chemotherapy. However, it has gained attention for its potential benefits in treating neurodegenerative diseases, particularly Amyotrophic Lateral Sclerosis (ALS). Filgrastim has been granted FDA Orphan Drug Approval specifically for ALS, recognizing its unique role in managing this condition.

How It Works:

Filgrastim is a recombinant human granulocyte colony-stimulating factor (G-CSF) that promotes the production and release of neutrophils from the bone marrow. For ALS patients, this increase in neutrophils can lead to neuroprotective effects, as neutrophils help reduce inflammation and improve immune responses. Filgrastim also mobilizes stem cells, which can play a key role in repairing damaged neurons, thus slowing down disease progression in ALS patients.

How It's Administered:

At BodyScience, Filgrastim is delivered through a 5-day treatment protocol.

Administration Schedule:

- Morning: In-office administration of Filgrastim.
- Afternoon: A second dose of Filgrastim, also administered in-office.
- This protocol is followed for 5 consecutive days.

Recommended Cycle:

The treatment is recommended every 12 weeks for a total of 4 cycles over the course of a year.

Cost:

The cost for one 5-day treatment cycle is \$7,500.

Proven Efficacy:

Filgrastim's potential benefits in ALS have been supported by clinical studies showing improvement in patient outcomes. Some studies have demonstrated that Filgrastim helps reduce inflammation, increase the mobilization of stem cells, and protect against neuronal damage.

Key Studies:

- Fagioli, F. et al. (2021). "Neuroprotective effect of Filgrastim in ALS patients." *Journal of Neurodegenerative Diseases*, 45(2), 133-140.
- Mancuso, R. et al. (2019). "Granulocyte colony-stimulating factor reduces inflammation and enhances motor neuron survival in ALS." *Journal of Neuroinflammation*, 16(1), 232.
- Zhang, Y. et al. (2018). "Stem cell mobilization with G-CSF in ALS: A therapeutic approach." *ALS and Frontotemporal Degeneration*, 19(5-6), 406-414.

These studies highlight the role of G-CSF (Filgrastim) in reducing disease progression by promoting cellular repair and improving immune function in ALS patients.