David C. Dale, MD
Severe Chronic Neutropenia International Registry
Granulocyte Colony Stimulating Factor (G-CSF) Dosing Guidelines

Goal: Relief of clinical infections, reduction of mouth sores/infections, at the lowest G-CSF Dose possible.

**Barth Syndrome**

Begin administration at 2.0 mcg/kg/daily.

After 7 to 10 days of G-CSF treatment.

Obtain three blood counts a week for two weeks to document and evaluate the lowest ANC. Blood count must be obtained at least 18 hours after last administration of G-CSF.

Goal: ANC averages between $1.0 \times 10^9/L$ to $1.5 \times 10^9/L$ and the patient shows clinical improvement, reduction or elimination of recurrent mouth sores, fevers or infections. If still having recurrent clinical symptoms, the dose should be increased by 1 mcg/kg/day in a stepwise fashion to increase the ANC and reduce or eliminate clinical symptoms.

Clinical symptoms improved and ANC goal achieved: Monitor ANC every week for two months and then monthly.

Clinical symptoms unchanged or ANC to low or too high: increase or decrease the G-CSF dose and repeat CBCs to evaluate the clinical symptoms and ANC response.

Good responders (a daily dose of G-CSF less than 3 mcg/kg/day) may want to switch to every other day dosing (double the daily dose) or three times a week (M-W-F) dosing (total dose for 7 days divided by 3).