

MEDICATION NAME:

**CYCLOSPORINE A**

**BRAND: NEORAL AND SANDIMMUNE.**

HOW IS IT GIVEN:	Injection (IV) or oral tablet.
HOW DOES IT WORK:	Impairs lymphocyte function and reduces antibody production.
COMMON DOSING REGIMENS:	2.5-3 mg/kg per day. Dosing based on blood levels, efficacy and side effects.
COMMON SIDE EFFECTS:	Hypertension (high blood pressure), tremor, muscle pain, gingival hypertrophy (overgrowth of gum tissue), headache, gastrointestinal discomforts, and neuropathy (nerve pain). Low magnesium levels.
RARE BUT SERIOUS SIDE EFFECTS:	Severe hypertension (high blood pressure) and vascular damage causing hemolysis, thrombocytopenia and renal failure. Infections may occur.
TYPICAL TIME TO RESPONSE:	2-4 weeks.
LIKELIHOOD OF INITIAL RESPONSE:	Estimated 40-85%
LIKELIHOOD OF LONG-TERM RESPONSE (3-5 YEARS):	The prevalence of sustained response off treatment has not been established.
OTHER CONSIDERATIONS:	Grapefruit juice may increase blood levels due to inhibition of an enzyme called CYP3A4 which is involved in regulating drug levels in the blood. Although Neoral and Sandimmune are both brand names for cyclosporin, they should not be used interchangeably because different dosing may be required and drug levels should be monitored when changing from one to the other

**References:**

1. Emilia, G., Morselli, M., Luppi, M., Longo, M., Marasca, R., Gandini, G., Ferrara, L., D'Apollò, N., Potenza, L., Bertesi, M., and Torelli, G. (2002). Long-term salvage therapy with cyclosporin A in refractory idiopathic thrombocytopenia purpura. *Blood*. Feb 15; 99(4): 1482-1485.
2. Hollander, A., van Rooij, J., Lentjes, G.W., Arbouw, F., van Bree, J.B., Schoemaker, R.C., van der Woude, F.J., and Cohen, A.F. (1995). The effect of grapefruit juice on cyclosporin and prednisone metabolism in transplant patients. *Clinical Pharmacology & Therapeutics*, March 57(3): 318-324.
3. Kappers-Klunne, M.C., and van 'T Veer, M.B. (2001). Cyclosporin A for the treatment of patients with chronic idiopathic thrombocytopenic purpura refractory to corticosteroids or splenectomy. *British Journal of Haematology*, Jul 114(1): 121-125.
4. Platelet Disorder Support Association: <https://www.pdsa.org/immunosuppressants.html>