

MEDICATION NAME:	ROMIPLOSTIM BRAND: NPLATE
HOW IS IT GIVEN:	Subcutaneous injection.
HOW DOES IT WORK:	Binds to the thrombopoietin receptor on megakaryocytes, which stimulates platelet production.
COMMON DOSING REGIMENS:	<u>Starting dose:</u> 1-3 µg/kg per week.. Dose adjustments made to maintain a platelet count between 50 -150 x 10 ⁹ /L depending on symptoms and activity level. CBC weekly until stable dose; then monthly. <u>Maximum Dose:</u> 10 µg/kg per week.
COMMON SIDE EFFECTS:	Headache, joint and muscle pain.
RARE BY SERIOUS SIDE EFFECTS:	Platelet count may drop suddenly if drug stopped abruptly. Thrombosis (blood clots) and bone marrow reticulin (fibrous scarring) have been reported, but are rare. Loss of response due to the development of neutralizing antibodies (rare).
TYPICAL TIME TO RESPONSE:	1-3 weeks.
LIKELIHOOD OF INITIAL RESPONSE:	Approximately 60-90% of patients have an initial response (platelet count >50 x 10 ⁹ /L).
LIKELIHOOD OF LONG-TERM RESPONSE (3-5 YEARS):	Approximately 80% of patients who respond initially maintain a platelet count >50 x 10 ⁹ /L if treatment is continued. The prevalence of sustained remission off treatment has not been established.
OTHER CONSIDERATIONS:	CBC weekly until stable dose is established; then testing may be less frequent. <u>Pregnancy:</u> Should not be used in pregnancy.

References:

1. Kuter, D., Newland, A., Chong, B., Rodeghiero, F., Romero, M., Pabinger, I., Chen, Y., Wang, K., Mehta, B., and Eisen, M. (2019). Romiplostim in adult patients with newly diagnosed or persistent ITP for up to 1 yr and in those with chronic ITP for more than one year: a subgroup analysis of integrated data from completed romiplostim studies. *British Journal of Haematology*. 185(3): 503-513.
2. Nplate. <https://www.nplate.com/>
3. Platelet Disorder Support Association <https://pdsa.org/platelet-growth-factors.html>
4. Stasi, R. (2011). ITP, interrupted. *Blood* 118(16):4297-4298.