

MEDICATION NAME:	ROMIPILOSTIM <b>BRAND: N-PLATE</b>
HOW IS IT GIVEN:	Subcutaneous weekly 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. Consider a higher dose if an urgent platelet increase is needed. Dose adjustments made to maintain a platelet count between 50 -100 x 10 <sup>9</sup> /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) is seen in 1-5% but bone marrow reticulin (fibrous scarring) is rare. Development of neutralizing antibodies (rare) surprisingly does not seem to interrupt therapeutic effect in most cases.
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 <sup>9</sup> /L).
LIKELIHOOD OF LONG-TERM RESPONSE (3-5 YEARS):	Approximately 80% of patients who respond initially maintain a platelet count >50 x 10 <sup>9</sup> /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.

**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.