

# Romiplostim: an alternative treatment option besides rituximab for the management of steroid refractory idiopathic thrombocytopenic purpura

Shailendra Kapoor

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## To the Editor,

I read with interest the recent article by Pasa et al. [1] about the efficacy of rituximab in patients with refractory chronic idiopathic thrombocytopenic purpura. Steroids and immunoglobulins undoubtedly remain the center of treatment of idiopathic thrombocytopenic purpura. However, the often faced dilemma for hematologists is how to treat steroid refractory patients. A number of new treatment options besides rituximab have emerged over the past few years that have proved to be of considerable benefit in such situations. One emerging treatment option for chronic, refractory idiopathic thrombocytopenic purpura is romiplostim (AMG 531).

Romiplostim is a subcutaneously administered thrombopoietin receptor agonist that acts by stimulating thrombopoiesis. Kutzer et al. [2] in a recent study to evaluate romiplostim noted an overall platelet response in 83.1% of the patients, while a durable platelet response was noted in 49.3% of the patients. A slightly higher response rate was noted in non-splenectomized patients in comparison to splenectomized patients. Overall, the side effect profile of romiplostim is very good, with the most frequent side effect being headaches which are noted in 50% of the patients [3]. Other serious side effects include a temporary exacerbation of the thrombocytopenia following the cessation of therapy. This is a relatively infrequent side effect and has been noted in only 10% of patients who receive romiplostim therapy [4]. In addition, romiplostim has also shown efficacy in the management of thrombocytopenia in patients with the myelodysplastic syndrome. For instance,

Kantarjian et al. [5] in a recent study have shown that 61% of patients with myelodysplastic syndrome showed a platelet response after romiplostim therapy with 48% showing a durable response for at least 2 months.

Romiplostim has so far proved to be a good treatment option for chronic, refractory idiopathic thrombocytopenic purpura. Further, larger trans continental studies are needed to further assess its efficacy and side effect profile in different populations and hopefully expand its application into regular clinical use so as to decrease the morbidity as well as improve the quality of life in patients with steroid refractory idiopathic thrombocytopenic purpura.

## References

1. Pasa S, Altintas A, Cil T, Danis R, Ayyildiz O (2008) The efficacy of rituximab in patients with splenectomized refractory chronic idiopathic thrombocytopenic purpura. *J Thromb Thrombolysis*
2. Kuter DJ, Bussel JB, Lyons RM et al (2008) Efficacy of romiplostim in patients with chronic immune thrombocytopenic purpura: a double-blind randomised controlled trial. *Lancet* 371:395–403
3. Newland A, Caulier MT, Kappers-Klunne M et al (2006) An open-label, unit dose-finding study of AMG 531, a novel thrombopoiesis-stimulating peptibody, in patients with immune thrombocytopenic purpura. *Br J Haematol* 135:547–553
4. Bussel JB, Kuter DJ, George JN et al (2006) AMG 531, a thrombopoiesis-stimulating protein, for chronic ITP. *N Engl J Med* 355:1672–1681
5. Kantarjian HM, Giles FJ, Fenaux P et al (2007) Evaluating safety and efficacy of AMG 531 for the treatment of thrombocytopenic patients with myelodysplastic syndrome (MDS): preliminary results of a phase 1/2 study. *J Clin Oncol (Meeting Abstracts)* 25:7032

S. Kapoor (✉)  
University of Illinois at Chicago, Chicago, IL 60612, USA  
e-mail: shailendrakapoor@yahoo.com