Induction of Fetal Hemoglobin by Recombinant Human Erythropoietin in Patients with End-Stage Renal Disease

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Dear Sir,

We agree with Blau [1] that the induction of fetal hemoglobin (HbF) by recombinant human erythropoietin (rHu-EPO) needs doses greater than the average of 24-50 U/kg reported in our article [2]

The first aim of our study was to demonstrate that in hemodialysis patients on rHu-EPO therapy there is no enhanced tendency to hemolysis because in these patients red cell survival is lower than in normal subjects. Otherwise, in all reported studies on the use of rHu-EPO (alone and in high doses) in the hope of stimulating HbF production in patients with sickle cell anemia or other disorders of globin chain synthesis (with or without renal failure), a defined protocol for a sure effect on HbF production by rHu-EPO has not been established so far (only a combination therapy with rHu-EPO and hydroxyurea seems to have some effect and with no advantage over hydroxyurea alone) [3-7]. Finally, in agreement with a recent report of Tomson et al. [8], we would like to propose (1) that rHu-EPO is capable of stimulating erythropoiesis in patients with sickle cell anemia and renal failure, but no stimulation of HbF production can be expected and (2) that the potential therapeutic role of rHu-EPO in patients with disorders of globin chain synthesis (also without renal failure) needs further studies.

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