We appreciate the comments of Dr. Cacciola and his collaborators on our article. As we reported, patient No. 2 had a normal granulocyte count before treatment with low-dose cytarabine (LDC), but his platelet count and hemoglobin level were low. After LDC therapy he achieved normalization of peripheral blood counts, which means normal platelet count and hemoglobin level. Chromosomal analysis of patient No. 1 was normal, the paragraph in the ‘Discussion’, ‘In our 3 patients with refractory anemia (RA)’ is indeed misleading and should be corrected as written in the ‘Results’ (p. 72): ‘Despite the excellent response in these 3 patients, the bone marrow chromosomes remained abnormal in patients 2 and 3’.

In all 8 patients marrow hypoplasia was observed, like the findings reported by others [1,2,3]. Although we mentioned this finding and discussed the hypothesis that LDC may act as a myelosuppressive agent, which suppresses the leukemic clone and allows normal marrow to differentiate, it is not the case in our 2 patients with RA whose marrow metaphases remained 100% abnormal.

Would it be due to persistence of residual leukemic cells as Dr. Cacciola et al. suggested, then at least a part of the metaphases would be normal.

Since 100% of the metaphases in the bone marrow of the 2 patients were found to be abnormal, it strongly supports our suggestion that LDC induced differentiation of the pathologic clone in the bone marrow of these 2 patients. Despite lacking an absolute increase of marrow blasts in RA the proliferation of a clone of abnormal hematopoietic stem cells with variable degree of abnormalities in cellular differentiation and regulation is the rule. It is conceivable that LDC caused these abnormal hematopoietic stem cells to differentiate into distinctive abnormal mature cells. In our 2 patients, remission suggests that differentiation rather than cytotoxicity is the mechanism involved in the effectiveness of LDC.

References