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# Study of efficacy of erythropoietin (epolyrec®) on hematologic parameters in patients with chemotherapy induced anemia and its comparison with erythropoietin (eprex ®)

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**Background and Aims:** Anemia is one of the usual complications of cancer and chemotherapy which its prevalence is different in regard to patients and disease conditions. Symptoms of anemia decrease the quality of patients' life. According to previous researches, recombinant erythropoietin, increases hemoglobin's levels and decreases the need for blood transfusion. Using of this product also upgrade quality of patients life.
**Methods:** In this randomized double blind trial, presence of epoetin alfa in medical market which is made in Switzerland (Eprex®) has compared with similar product made in Iran (Epolyrec®) in regarding to efficacy and safety. 80 patients with Hb < 11 g/dl were divided in one of the two groups of Eprex® and Epolyrec® and they were received 100 IU/kg/week in duration of 8 weeks. Before the study, a baseline blood sample was given from the patients. Amount of hematologic markers of anemia were determined in the samples. During the 4th and 8th weeks of treatment 2 blood samples were given from patients. Also the reported adverse drug reactions were registered in 2 groups. Data were analyzed by SPSS 17 and a P-Value less than 0.05 were considered as significant.
**Results:** In this research the average final hemoglobin of Eprex® group was 10.2 ± 0.8 g/dl which in relation to the average basic hemoglobin (9.8 ± 0.7 g/dl) increased. Also the average final hemoglobin of Epolyrec® group was 11.36 ± 1.2 g/dl which in relation to the average basic hemoglobin 10.21 ± 0.59 g/dl increased. Any adverse effects which cause exclusion of patients from research weren't observed.
**Conclusions:** It seems that Epolyrec® is comparable to the Eprex®. It also has lesser cost and therefore could be prescribed in anemia induced chemotherapy cases and could be used by patients.

**Keywords:** Epolyrec; Eprex; Anemia; Chemotherapy induced anemia