

## **Abstract**

Blood counts belongs among basic examination methods in hematology laboratory. It is used to determine the basic parameters of leukocytes, erythrocytes, hemoglobin, hematocrit and platelets.

The goal of study was to determine which blood counts have changed during the treatment of patients with myelodysplastic syndrome using immunomodulatory drug lenalidomide.

Analysis of blood samples were performed on the Sysmex XE-5000. The selected blood counts parameters were evaluated in two periods – before the beginning of the treatment and during the treatment. The final blood counts showed increasing concentrations of hemoglobin and decreasing platelet values; other blood count parameters have not changed significantly. The evaluated blood counts changes could be used to determine the efficiency of the treatment and the transfusion therapy could be stopped based on these results.