Bachelor thesis is divided into several parts. The clinical section is devoted physiology, the description of blood elements, the physiology of blood coagulation, blood groups, defensive characteristics of blood. In patolofyziologii mention basic hematologic malignancies, I describe AML - basic symptoms, course, diagnosis, treatment options. A separate chapter is developed problems haematopoietic cells. In the clinical section are also included relevant data from medical and described in more detail the course of hospitalization.