

This final thesis deals with four main types of leukemia (AML, ALL, CML, CLL). Their etiology, pathogenesis, clinical symptoms, diagnostics and treatment are described in detail in the first chapter. Second chapter deals with the main purpose of this thesis, which is the description of epidemiological characteristics and incidence and mortality trends of leukemia in Czech Republic. Czech statistical data is compared with world statistics.

Leukemia is malignant blood diseases, which accounts for 3% of all malignant tumors. Over the past 30 years there has been an increase in leukemia incidence and mortality in Czech Republic by approximately 50%. This is in accordance with the same development in the world. By the year 2015 we expect these values to increase further by 10%. The highest incidence of leukemia occurs in countries with high living and economic prosperity. In 1997 there was recorded a decrease in the rate of mortality increase. This is due to modern diagnostics and therapy and the possibilities of allogenic and autologous bone marrow transplantation.