

## ABSTRACT

The main focus of this thesis is to assess a genealogical frequency of homo- and heterozygotes for a mutation in a promoter region of UGT 1A1 gene. This mutation is typical for Gilbert's syndrome. It explains a genesis, symptoms, pathology and also a therapy of this syndrome. It discusses a possibly protective effect of this polymorphic mutation that might result in a lower incidence of vascular diseases (myocardial infarction, stroke, atherosclerosis, pulmonary embolism). An important contribution is also an attenuation of stress due to hyperbilirubinaemia. This thesis was worked out in a cooperation with GENVIA Ltd.