

The introductory part of this thesis gives insight into selected aspects of the issue deals with hyperproliferative outlining the molecular basis of skin diseases, which are included in addition to psoriasis as well as the characteristic representative of non-melanoma skin cancers. Further analyzes partly exogenous influence of UV radiation on their formation. The actual research work is focused on a group of genes whose expression was studied in actinic keratosis disease in relation to its treatment of topical immunomodulators - imiquimod. Examined genes can be divided into groups of genes modulating the immune response, genes involved in apoptotic processes and the genes playing a potential role in tumor formation.