

2015-2018 – project GlioProSer "Quantitative serum profiles estimation of proteins related to glioma angiogenesis and invasiveness", funded by the Research Council of Lithuania, head dr. D.Skiriutė

Glioma is one of the most common and highly malignant brain tumors. The treatment of glioma is complicated by the absence of reliable tools, which would allow to monitor essential aspects of tumorigenesis such as cell invasiveness and angiogenesis. The main goal of the project – to determine glioma specific quantitative profiles of a set of cancer associated proteins in sera of patients diagnosed with high grade glioma (HGG). For implementation of the objectives, 10 molecular markers known to be involved in tumor invasiveness and angiogenesis will be analyzed by using ELISA based multiplex protein array technology in pre and postoperative screening of blood samples of glioma patients. Glioma specific protein profiles will be deduced by examining blood samples of healthy individuals. During the entire duration of the project, sera obtained from 150 to 200 individuals will be examined. In addition, postoperative tumor samples of the examined glioma patients will be used to compare expression levels of the target protein encoding genes with the levels of their products (target proteins) in sera. Results obtained from our studies are expected to be of great value as an aid for determining the degree of tumor malignancy and monitoring gliomagenesis status during the surgical and postoperative treatment.