

## **ABSTRACT**

Signal transmission is an efficient mechanism that allows fast and specific response of eukaryotic cells to small changes in the extracellular and intracellular information. Many cascade of protein kinases in signaling pathways are deregulated in human diseases and represent a valuable target for their therapy. This work has been devoted to inhibit Src kinase activity after application of dasatinib on melanoma cells in cell culture. Dasatinib is multikinase inhibitor of protein tyrosine kinases, and with high efficiency inhibits Src and other members of this family of kinases. Dasatinib is already in use as anticancer drug in some tumors, while another is in late stage clinical trials. Results showed mainly the effect of Src inhibition on two main signaling pathways important for survival and proliferation of melanoma cells, MAPK and AKT. In the literature it is not known many links MAPK and Src at melanomu, but recently has been reported that the Src inhibiting translocation of ERK1 / 2 in the core, thereby accelerating the proliferation of melanoma cells.