

Nencki Institute of Experimental Biology

Patent for the Team of Prof. Bożena Kamińska-Kaczmarek

2019-03-19



In November 2018, the Patent Office in Japan granted a patent for the invention entitled "Compositions and methods for treating glioma" (JP6426001). The subject of the patent is the innovative method using synthetic, short interfering peptides in the therapy of gliomas. Cancer cells overexpress and secrete proteins, that reprogram cells in the microenvironment, into cells which potentiate tumor invasion and growth. Selected peptides block the activity of tumor derived proteins: granulocyte and macrophage colony stimulating factor (GM-CSF) and proteins acting through integrin receptors via the RGD amino acid motif. This inhibition results in reduced invasion and glioma growth.

The patent inventors are scientists from the Nencki Institute of Experimental Biology: prof. Bożena Kaminska, dr Malgorzata Sielska, dr Paweł Wisniewski and dr Aleksandra Ellert-Miklaszewska from the Laboratory of Molecular Neurobiology. The owner of the patent is Glia Sp. z o.o., who also worked alongside the project development. The invention was granted with a patent in the United States (US 9453050 B2), and new patent applications are under consideration in Europe, Canada and Israel.