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## Resistance of the organ of vision to bevacizumab (Avastin) at in its systematic administration in children with solid malignant tumors

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Since 2009, the Oncology Department of Scientific-Practical Center of Specialized Medical Care for Children named after V F Voino-Yasenetsky, within Pirogov Russian National Medical Research University is treating malignant tumors in children using bevacizumab (Avastin) according to the approved protocols. In 2011, for the first time in Russia, after evaluating the effect of bevacizumab (Avastin) on the resistance of the eye tissues in children with cancer we decided to use bevacizumab (Avastin) for the treatment of retinopathy of prematurity. By this time, there were only a few publications on this topic in the world and none in Russia. For the treatment of the children with cancer, bevacizumab (Avastin) was used systemically in the large doses of (5-15 mg/kg). The research includes the examination of 25 patients aged 3 to 17 years with malignant solid tumors of the brain, lungs, bones and nasopharynx. It was discovered that the systemic use of high doses of Avastin does not affect the tissues of the eye and its function but rather it showed a greater resistance to angiogenesis blockers. Changes in the eyes only reflected the dynamics of the tumor process. These studies allowed us to proceed to the intravitreal administration of Avastin for patients with the retinopathy of prematurity.

### Biography

Nazarenko Anastasia Olegovna MD is a Resident of the Department of Ophthalmology of Pirogov Russian National Research Medical University. She graduated from Peoples' Friendship University of Russia in 2017. Her scientific interests includes: retinopathy of prematurity, myopia and prophylaxis of the diseases.

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