

The present work includes research photodynamic therapy (PDT) colorectal carcinoma. The actual experiment was conducted in collaboration with the Institute of Biophysics and Informatics 1st in 2005-2008. Colorectal cancer is the most common malignancy of the Czech population. Risk of disease of colorectal cancer in the Czech population reaches 5.9% and still growing. Still is a large group patients with advanced cancer (approximately 30% of patients), which is indicated only palliative therapy. One of the most common procedure in patients with advanced cancer is the foundation of the stoma, which significantly extends the life of the patient. Photodynamic therapy is already used by default.

We focused on the possibility of treatment of colorectal cancer phthalocyanine, which is among photosensitisers second generation with a rapid uptake in the tumor specimen. The aim of current research is to improve screening and to design new treatments that would achieve better results than existing procedures. PDT can improve the quality of life and in patients with advanced malignant disease and prolong survival interval.