

Laboratories and research institutes around the world investigated, patented or implemented numerous platinum, gold and other metal complexes for cancer treatment. None of these substances is fully effective and most of them cause severe side effects. The aging process of societies observed in developed countries is associated with increased disease morbidity, including cancer. In Poland, for every 100,000 people, 222 will have cancer, and 136 will be fatal cases. The most commonly diagnosed cancers are: breast, colon, lung, endometrial, ovarian and cervical cancer in women, while lung, prostate, colon and stomach cancers prevail in men. The increase in the number of cases and deaths due to cancer encourages scientists to develop new programs to protect against cancer, implement and continuously improve the methods for treatment, and to develop effective and safe methods of assisted outpatient treatment of cured patient in order to prevent the remission of cancer.

The research project aims at development of novel innovative gold (III) complexes with anti-inflammatory and anticancer activity in the colon and assessment of their mechanism of action.