The aim of the research was to investigate the possibilities of increasing the efficiency of auto vaccinotherapy through the use of the endogenous interferon inductor amixin in mice with Lewis
lung carcinoma. An effective plan for use of tumor vaccine and amixin, which is administered orally (25 mg/kg) for 3 hours before each of the five injections of the vaccine was developed. Its use in mice with transplanted Lewis lung carcinoma was significantly exceed the results of the introduction of anti-tumor vaccine alone: index of inhibition of tumor growth respectively 54,59 ± 1,97 and 43,79 ± 0,96%, and the average lifespan of mice – 56,2 ± 2,06 and 47,0 ± 1,50 days. In animals with minimal residual tumor (after surgical removal of the primary tumor) in adjuvant mode of antitumor vaccines amixin was effective with the introduction of the latter in the dose 3 hour before the vaccine or after 1 day after each introduction. The frequency of metastasis was decreased to 70%, the average number of metastases and their volume – 8.8 and 34.0% in comparison with those operated control mice, when compared to similar data of mice who received only the vaccine at 2.0 and 2.25 times. The index of inhibition of metastasis using a combined scheme was 92.6%, vaccine; alone vaccine – 83,08%. Further determination the mechanisms of synergistic effect antitumor vaccines and amixin will enable the use of different biopreparations and will help to develop effective schemes of therapy of cancer patients.

**Key words:** amixin, cancer vaccines, the Lewis lung carcinoma.

© Palladin Institute of Biochemistry of the National Academy of Sciences of Ukraine, 2016

{spoiler title=References}


**Experimental study of the efficacy of combined use of cancer vaccine and interferon.**


{/spoiler}