

CANCER AUTOVACCINE (CAV) – NEW SPECIFIC ACTIVE ANTITUMOR AGENT

Description

Mechanism of action. Cancer Autovaccine prevents further development of relapses and metastasis in the patients, who were radically operated concerning various tumors. Has a wide spectrum of action causing activation of immune response: raises cytophagous activity of neutrophils, strengthens their digesting function, stimulates antitumor cytotoxic activity of natural killer cells and T-lymphocytes.

Indications for the use. Secondary (functional) immunodeficit, depression of cytophagous and cytolytic function. It is recommended as independent immunore-creative agent in the postoperative period, and also for immunocorrection after postoperative chemotherapy and radiotherapy. CAV renders antitumor effect, improves an acceptability of hard courses chemotherapy and radiotherapy, allows to overcome development of cytopenia. It has antirelapse and antimetastatic action practically at all nosological forms of malignant neoplasms. There are no contraindications to the use of CAV.

Innovative Aspect and Main Advantages

Preparation. CAV is repared from autologous tumor by its processing with products of synthesis of a saprophytic microorganism *B.subtilis* B-7025.

The proteases and antibiotic contained in a filtrate, cause lysis and complete destruction of tumor cells. Thus, the recognition of membranous antigens is increased. They stimulate activity of effector cells, antitumor immunity, immune answer of macrophages, T- and B-lymphocytes, neutrophils, natural killers.

Absence of living cells and viruses in CAV are guaranteed.

Way of introduction. A single dose at hypodermic injection contains 1,5 mg of protein. The complete course consists of 3 injections with 7 day's interval. The revaccination should be carried out after 1 and 6 months.

The vaccine is not toxic, has no anaphilotoxigenic properties, does not give local reactions. As a side effect in some patients the insignificant pyrogenic transitional reaction observed with rise of temperature on 1–2 °C which completely passes in 8–12 hours.

Combination to other methods of therapy. After radical operation (early stages of disease, the absence of metastasis) on assignment of the physician an effective utilization CAV without chemo- or radiotherapy is possible. If carrying out courses of chemo- or the radiotherapies is necessary immunotherapy by CAV may be started in 18–21 days after their end.

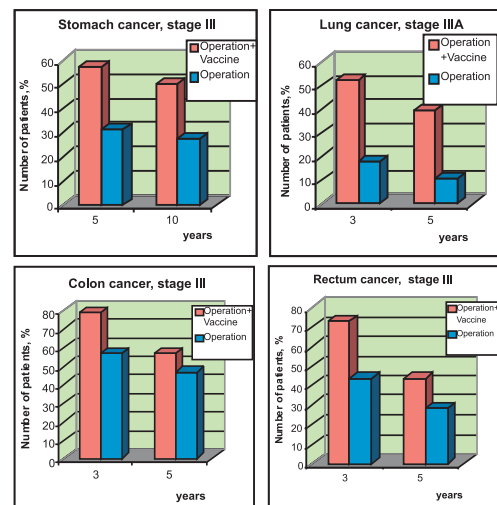


Fig. 1. Efficacy of anticancer autovaccine during complex therapy of cancer patients (overall survival)

Areas of Application

Oncology

Stage of Development

Certificate for clinical application in Ukraine is obtained.

Clinical trials. The clinical trials of CAV were carried out during 30 years on the base of various research institute of Ukraine and Russia. As a result of control randomize trials the data about survival of the patients who were radically operated are received. So, the five years' survival rate at a carcinoma of the stomach stage III in patients with CAV was 57,1 % (control group without CAV – 30,4 %); at a cancer colon and rectum stage T₃₋₄ N₁₋₃ Mo – 63 % and 57 % (in the control 29 % and 33 % accordingly); at a lung cancer stage IIIA – 39,9 % (in the control – 10,6 %); at a breast cancer stage III – 64,2 % (in the control – 40 %).

Contact Details

R. E. Kavetsky Institute of experimental pathology, oncology and radiobiology of the National Academy of Sciences of Ukraine

Potebnya G. P.

45, Vasylkivska Street, 03022, Kyiv, Ukraine

Tel: (38 044) 259 08 75; Fax: (38 044) 258 16 56

E-mail: iris@onconet.kiev.ua, iepor@onconet.kiev.ua

Website: www.onconet.kiev.ua