International cooperation of NatiVita JLLC in research and production innovations

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International cooperation

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Every human being is genetically unique. So every tumor developed has a very specific genetic profile as well. Fortunately, a highly personalized approach is accessible today.
MANUFACTURE OF VACCINE ON THE BASIS OF DENDRATE CELLS (about 14 days)

CANCER ANTIGENS ADDITION

Cultivation and activation of dendritic cells using modern biotechnologies.

OBJECT:
Significant increase of survival rate of patients and reduction of likelihood of relapse by reinforcement of specific anticancer immunity.
INNOVATION

Whole genome decoding and total cell protein analysis as well as other modern methods of molecular genetics will be used in research of new individual therapeutical targets for immune activation.

Terms of implementation: 3-5 years (taking into account clinical trials and assessment of disease-free and overall survival).
EXPECTED EFFECTS
The use of personalized dendritic cell vaccines will increase the relapse-free survival rate in breast and lung cancer.

- Disease-free survival in 2 times
- Disease-free survival in 1.5 times
CRISPR/Cas9 TECHNOLOGY IS A NEW GENOM EDITING TOOL
Every tumor is a result of congenital or acquired mutations realization.
Having determined the damaged gene, we can investigate its function, understand it’s role in tumor development, and then elaborate new methods cancer treatment and prevention.
CRISPR/Cas9 technology allows to directly edit DNA structure in specific loci.

The CRISPR / Cas9 system consists of a special RNA molecule accompanied with enzyme that accurately recognizes any gene of interest and cuts the gene found inactivating it. If you add an intact copy of the gene to this complex, then it will replace an inactivated defective gene.
INNOVATION

the CRISPR / Cas9 system is the most advanced and modern gene editing tool at the moment. It is flexible and versatile, and has a variety of ways of potential application. The development of this technology will lead to effective cure of various oncological diseases using an individual approach. It may become a cornerstone of the development of new fundamental ways HIV infection and hepatitis B treatment (when ethically approved).

Terms of implementation: 3-5 years.
The disease doesn’t wait...

Should we...?

Thank you for your attention