

# VITANAM – 新一代的免疫調節劑

VITANAM –  
A NEW GENERATION IMMUNOMODULATOR

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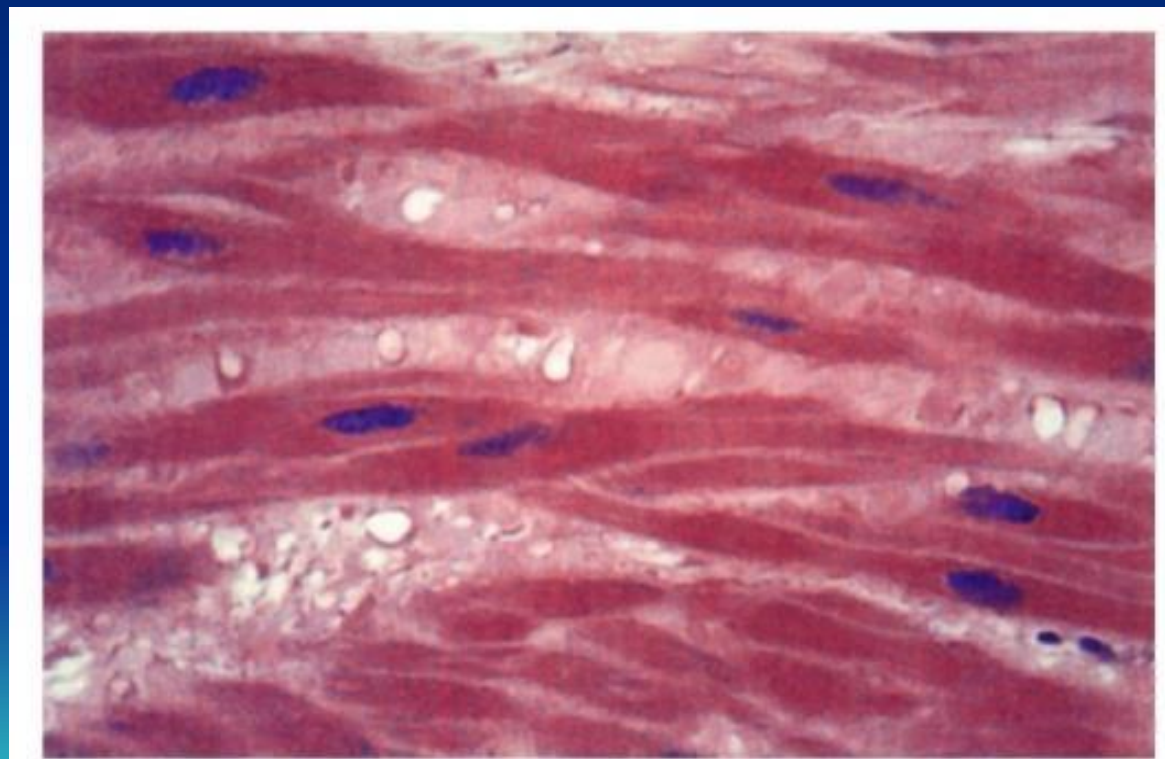
Vitanam is an immunostimulant for a broad spectrum of action, an antioxidant with anti-diabetic properties and restoration of microcirculation, as well as a selective anti-tumour agent.

The drug does not have **mutagenic, embryotoxic, teratogenic, allergic properties** and does not affect reproductive function.

Vitanam 是一種廣效性免疫刺激素，可作為具抗糖尿病特性的抗氧化劑，回復血管微循環以及當作選擇性的抗腫瘤製劑。這個藥物沒有致突變性、胚胎毒性、致畸型性及致過敏性，也不會影響生殖功能。

Vitanam activates Ca-signaling in myoblasts, thereby promoting accelerated regeneration of muscle tissue due to trauma, surgery or muscular dystrophy of another genesis

促進與加速受創、開刀或肌肉性營養不良症之肌肉組織再生



In complex therapy Vitanam In oncological patients in the postoperative period, the hemoglobin and immunological background are increasing, the level of marker enzymes is normalized, the healing period of the postoperative wound is less, and there are no purulent-inflammatory complications.

對於癌症病人開刀後期會增加血紅素與指標酵素濃度正常化，開刀後期恢復期短，也沒有化膿性發炎併發症發生。

In the complex treatment of tuberculosis, the use of Vitanam showed a more active resolution of infiltrates, a cessation of bacterial release and the closing of the cavity of decay than in patients receiving only antituberculous drugs.

Clinical trials of Vitanam on adaptive processes in the system "Mother-placenta-fetus" and the condition of the newborn in the period of early neonatal adaptation showed an improvement in the immune functions of children in the neonatal period and a sharp increase in the percentage of newborns admitted to anti- tuberculosis vaccination.



In case of type 2 diabetes, Vitnam therapy reduces blood sugar, increases adiponectin secretion, contributes to a statistically significant decrease in insulin resistance, increases the level of biologically active insulin in serum, lowers triglycerides and beta-lipoproteins, normalizes cholesterol, restores microcirculation and promotes healing affected areas with a "diabetic foot", exerting a strengthening effect on the walls of blood vessels, improving their elasticity.

This ability Vitnam to improve blood microcirculation is able to activate the metabolic processes of the cardiovascular system as a whole due to the complex action of the components of the drug.



The dynamics of changes in the content of adiponectin (脂聯素), resistin (抵抗素),  $\alpha$ -TNF (腫瘤壞死因子) and ghrelin (生長激素) in the serum of patients with type 2 diabetes mellitus

| Indicators  | Before the appointment of Vitanam         | After graduation treatment                 | P                             |
|---|---|--|-------------------------------|
| <p>The content of adiponectin in the blood serum, mcg/ml</p> <p>The first group (n = 21)</p> <p>The second group (n = 22)</p> | <p><b>9.23±2.33</b></p> <p>12.33±4.14</p> | <p><b>18.49±5.77</b></p> <p>12.16±5.36</p> | <p>P=0.0001</p> <p>P=0.94</p> |
| <p>The content of <math>\alpha</math>-TNF in serum, pg/ml</p> <p>First group (n = 21)</p> <p>The second group (n = 22)</p>    | <p>4.8±2.77</p> <p>5.42±4.17</p>          | <p>4.8±1.53</p> <p>5.54±4.4</p>            | <p>P=0.18</p> <p>P=0.94</p>   |
| <p>Ghrelin content in serum, pg/ml</p> <p>The first group (n = 21)</p> <p>The second group (n = 22)</p>                       | <p>33.07±33.07</p> <p>44.07±44.56</p>     | <p>15.82±12.26</p> <p>19.2±12.56</p>       | <p>P=0.18</p> <p>P=0.24</p>   |

# Effect of Vitanam on the healing of the "diabetic foot"

- 1 month of therapy
- 2 months later



Vitanam in the culture of the transplanted cells of human adenocarcinoma of the HeLa line, the human monoblastoid line U937, the human MCF7 mammary carcinoma and the murine fibroblastoma L929, has a cytotoxic effect, the mechanism of which is due to the induction of caspase-3 by causing selective apoptosis of the tumor cells.

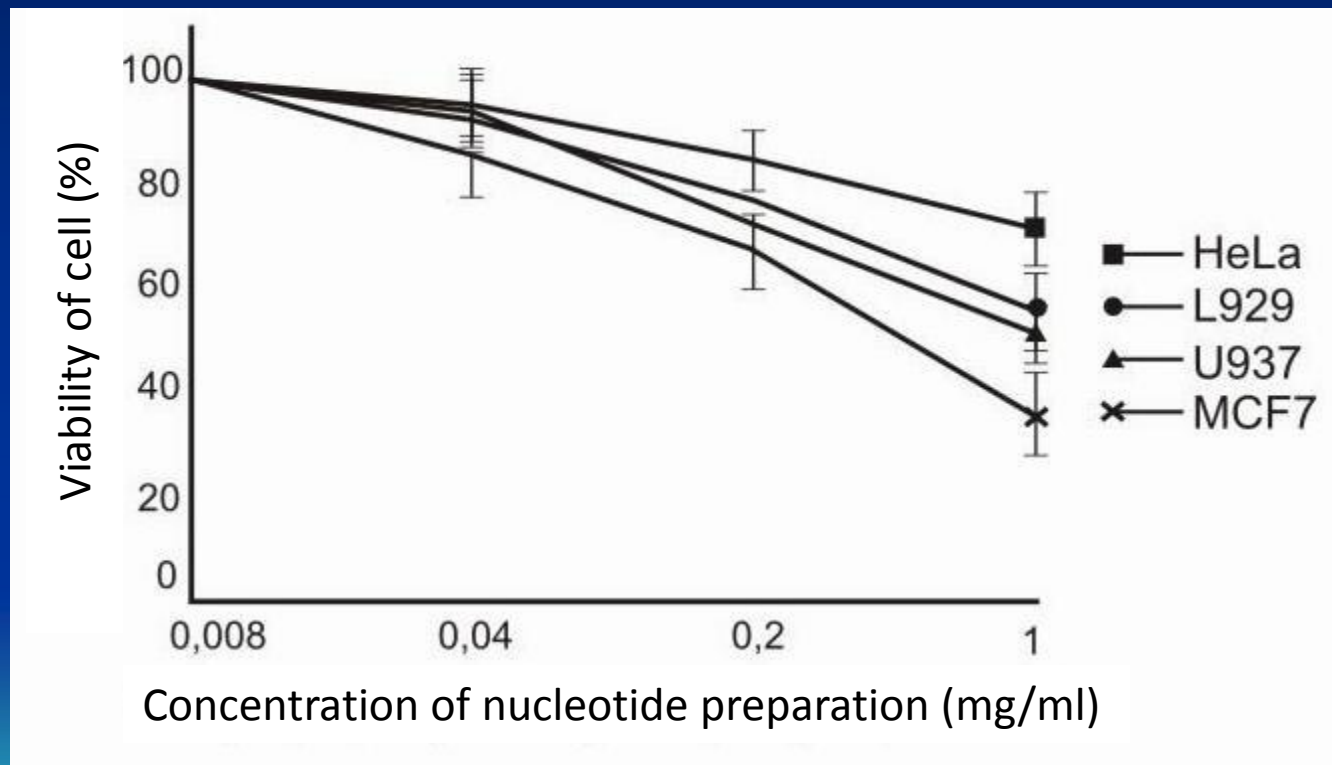
Vitanam 在移植的人類腫瘤細胞株具細胞毒性，會藉由導入增加caspase-3 (細胞凋亡蛋白)，引起選擇性腫瘤細胞凋亡。

This effect is accompanied by a decrease in the proportion of G<sub>2</sub>/M of the population of cells of transplanted tumors, leading to an increase in the proportion of apoptotic cells (凋亡細胞) (<G<sub>1</sub>).





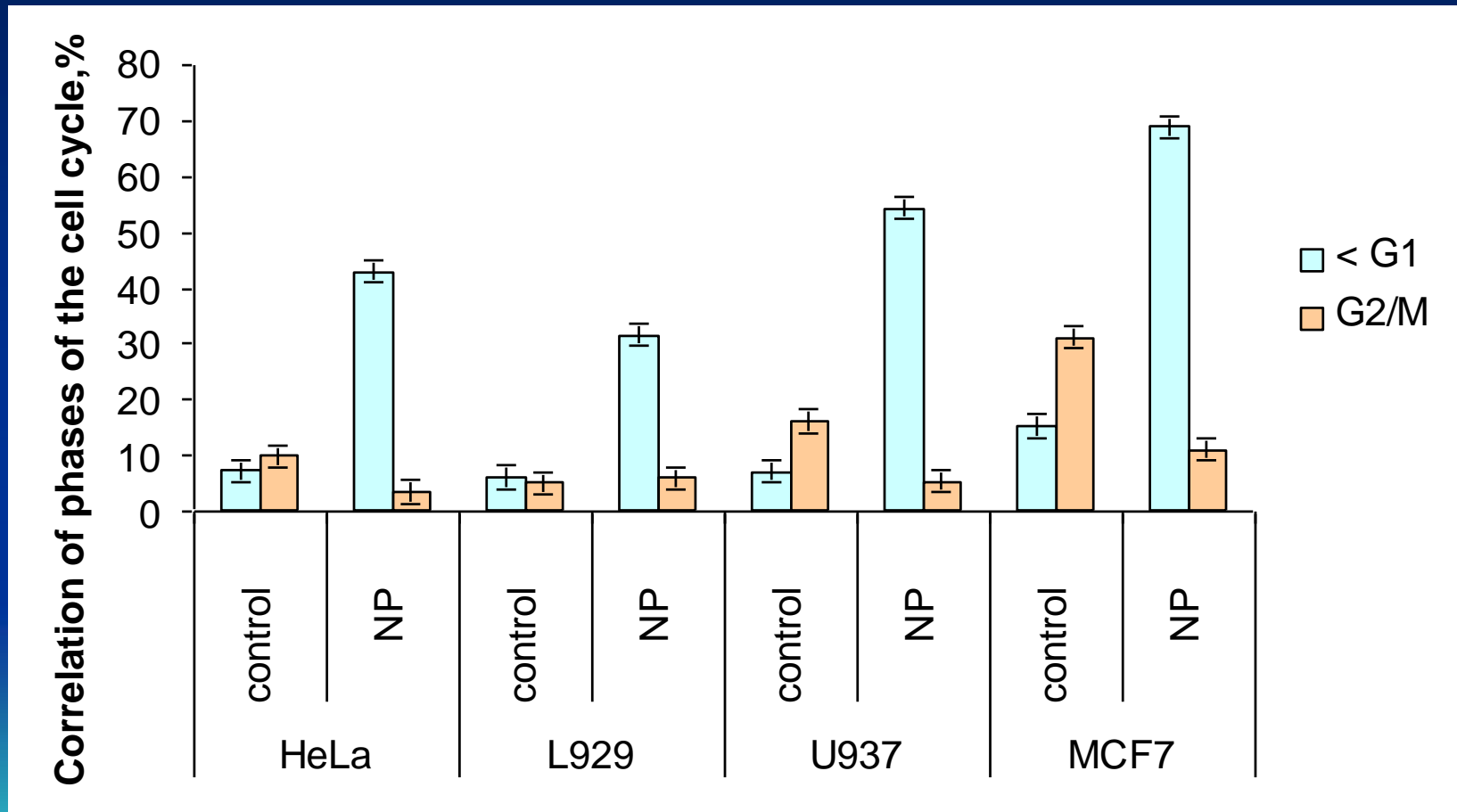
# Influence of the nucleotide preparation Vitanam on the viability of cells in cultures of transplanted tumors



## Effect of the nucleotide preparation Vitanam on the activity of caspase-3 (細胞凋亡蛋白) in cell lines

| Cultures of cell lines  | Vitanam           |                   |
|---|-------------------|-------------------|
|   | 0.2 mg/ml         | 0.5 mg/ml         |
| <b>Activity of caspase-3, nmol AFC/<math>\mu</math>g of protein</b> |                   |                   |
| HeLa  | 0.500 $\pm$ 0.003 | 1.100 $\pm$ 0.002 |
| L929  | 0.290 $\pm$ 0.001 | 0.910 $\pm$ 0.003 |
| U937  | 0.340 $\pm$ 0.004 | 0.960 $\pm$ 0.003 |
| MCF7  | 0.370 $\pm$ 0.002 | 1.500 $\pm$ 0.003 |
| Human Leukocytes  | 0                 | 0                 |

# Effect of the nucleotide preparation Vitanam (0.5 mg / ml) on the cell cycle of tumor cells upon culturing for 72 hours




The method of Vitanam preparation is pure, waste-less and protected by Russian and international patents.

At the World Salon "Brussels-Eureka-98" the invention was awarded the Gold Medal. 2000 - Silver medal VVC, in 2001- Silver medal from the Ministry of Health of the Russian Federation for contribution to the health of the nation.

In 2003 - Diploma of the 1st degree at the exhibition contest "Highly effective food technologies, methods and tools for their implementation."

Vitanam is registered as a medicament for immunostimulating action for the treatment of acute respiratory viral infections in adults and children of 6 years age and older, for seasonal prevention of acute respiratory viral infection, as well as for the treatment of type 2 diabetes mellitus.





Eureka exhibition of innovations by Golden Medal



Paul Ehrlich Golden Medal for scientific achievements in medicine

# PriMed



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In 2009, the book "PRIMED: An Integrative Approach to Cancer Treatment" was published in the USA together with colleagues from the Cancer Atherton Health Institute.

In 2011 at the exhibition "Innovative companies - the healthcare system" in Dubna, Vitanam was awarded a diploma for innovation for health.

敬請指教

