



INITIUM-ADVANCE

ABOUT INITIUM-ADVANCE



- The company's offices are located in Moscow and Kazan

CORE BUSINESS ACTIVITIES:

- Manufacture and sale of finished pharmaceutical products, dietary supplements, functional foods, and cosmetic products based on Siberian fir terpenes
- Distribution of pharmaceuticals, dietary supplements, and cosmetic products
- Near-term plans include entering the market with a medical device in the form of a spray based on Siberian fir terpenes



SCIENTIFIC BACKGROUND

OF TERPENOIDS IN PHARMACOLOGY

A new line of pharmaceutical products has been developed using biotechnological methods based on terpenoids (terpenes), which possess a range of proven biological activities:

TERPENOID GROUP	ACTIVITIES
Monoterpenoids	Antitumor, antimicrobial, antiviral, analgesic, anti-arthritic, anti-inflammatory, hypotensive.
Sesquiterpenoids	Analgesic, antiarrhythmic, antiepileptic, cholaretic, cholagogic.
Diterpenoids	Antitubercular, antitumor, wound healing, anti-inflammatory, antibacterial, antiviral.
Triterpenoids	Coronary vasodilating, membrane-stabilizing, inhibits platelet aggregation and hemolysis.

SCIENTIFIC BACKGROUND

OF TERPENOIDS IN PHARMACOLOGY



The use of a terpenoid complex has enabled the development of a number of active and potential polyactive agents, which can have both clinical and symptomatic applications (according to the off-label use scheme).

The developed pharmaceuticals:

- are non-toxic and have no side effects
- can reduce the toxic impact of other drugs when used in combination (e.g., chemotherapeutic agents in oncology)
- can be used in all age groups, as well as in patients with multiple comorbidities (pathologies)
- block the development of resistant pathogenic microflora

PHARMACEUTICALS



- Abisil Substance
- Abisil® topical medicine (on the Russian pharmaceutical market since 1997)
- Abisilin® oral antitumor drug (Phase I clinical trials completed)
- A drug (capsules) for the treatment of atherosclerosis and metabolic syndrome (preclinical stage)
- CardioOrganic® Omega-3 dietary supplement (on the pharmaceutical market since 2018)
- Vitaterpen Active® dietary supplement (on the pharmaceutical market since 2020)
- AbiSaver® hygienic hand gel with terpenes (on the market since 2019)
- ABISIL® DENTAL line of therapeutic and prophylactic oral care products: toothpaste, gel, and mouthwash (pilot market launch in October 2025)
- Cosmetic products in the form of balms: for lips, for the nose, and "FOCUS ENERGY" balm for reducing fatigue and improving concentration (pilot market launch in December 2025).

ABISIL® – HERBAL ANTI-INFLAMMATORY DRUG



Dosage form: solution for topical and external use (oil-based)

Composition: active substance: Abisil (Siberian fir terpenes) containing bornyl acetate 10.0-20.0 g; excipient: sunflower oil up to 100 g

Marketing authorization: LP-No.(007393)-(RG-RU) dated 25.10.2024

Indications for use:

In general surgical practice: purulent-inflammatory diseases of the skin and soft tissues (trophic ulcers and long-term non-healing purulent postoperative and post-traumatic wounds, fistulas, bedsores, burns and frostbite, abscesses and phlegmons, including those of the maxillofacial area).

In dentistry: stomatitis, periodontal disease, gingivitis, alveolitis, complications during dental prosthetics.

In otorhinolaryngology: otitis, eustachitis, sinusitis, rhinitis, rhinopharyngitis, pharyngitis, tonsillitis, post-tonsillectomy conditions, laryngitis, etc.

In dermatology: erysipelas, pyoderma.

Practical use of the drug Abisil® has demonstrated a consistently high therapeutic effect. Patients note its mild action, pain relief, and complete absence of undesirable side effects.

RESEARCH ON THE EFFECTS OF TERPENES ON CELLULAR AGING METABOLIC PATHWAYS AND THE DEVELOPMENT OF MALIGNANT TUMORS

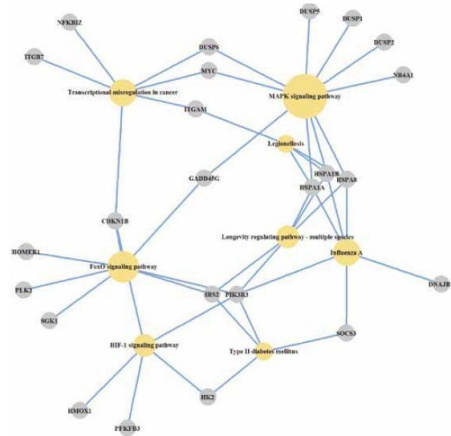


Fig. 1c: KEGG database metabolic pathways with a predominance of Abisil-induced genes in normal fibroblasts. The figure shows differentially expressed genes, the cellular metabolic pathway, and organism-level processes that are statistically predominant in the GSEA analysis.

According to transcriptomic study results, exposure to the Abisil substance in aged fibroblast cells led to the restoration of expression levels for certain genes responsible for lifespan. In normal fibroblasts, terpenes induce genes responsible for stress response, apoptosis regulation, and tissue regeneration.

In cancer cell lines, Abisil induced the expression of both tumor suppressors (members of the GADD45, DUSP, and DDIT gene families) and proto-oncogenes (c-Myc, c-Jun, EGR, and others).

Abisil restores gene expression levels in aged cells to those of young cells and demonstrates potential anti-aging and anti-tumor effects in aged and cancerous cell lines.

USE OF A COMPLEX OF NATURAL TERPENOIDS FOR THE PREVENTION OF ACUTE RESPIRATORY DISEASES IN PRESCHOOL CHILDREN*



A proactive study was conducted in 2016-2017 at the Department of Propaedeutics of Children's Diseases and Faculty Pediatrics with a course of children's diseases of the Faculty of the Federal State Budgetary Educational Institution of Higher Education "Kazan State Medical University" of the Ministry of Health of the Russian Federation, based on permission No. 9 dated November 22, 2016, from the Local Ethical Committee of Kazan State Medical University.

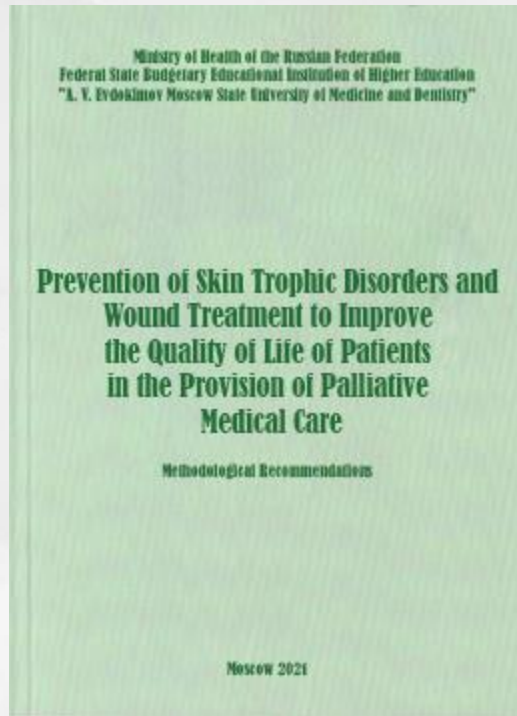
The aim of the study was to investigate the experience of using a complex of natural terpenoids from Siberian fir for the prevention of acute respiratory diseases in children attending preschool institutions.

A total of 7,129 children aged 3 to 7 years were examined and divided into groups. Children in the main group received a complex of natural terpenoids intranasally in courses lasting from 1 to 3 months.

The resulting data analysis demonstrated a positive effect from the use of the complex of natural terpenoids: a 1.7-fold reduction in the number of sick-day absences per person per year and a complete eliminative effect against the Epstein-Barr virus after 65.51 ± 2.98 days. This fact convincingly proves the beneficial effect on the local immunity of the upper respiratory tract and the cost-effectiveness of using the drug Abisil in preschool institutions.*

*Zakirova A.M., Fetisova T.G., Rashitov L.F., Salakhutdinov R.I., Rashitova E.L. Primenenie kompleksa prirodnykh terpenoidov v kachestve profilaktiki ostrykh respiratornykh zabolevaniy u doskol'nikov [Use of a complex of natural terpenoids for the prevention of acute respiratory diseases in preschool children]. *Sovremennye problemy nauki i obrazovaniya* [Modern Problems of Science and Education]. 2018;5. URL: <http://www.science-education.ru/ru/article/view?id=28052> (access date: 25.09.2018).

USE OF THE DRUG ABISIL IN PALLIATIVE MEDICINE*



Abisil is recommended for the treatment of long-term non-healing wounds, disintegrating tumors, as well as decubital and trophic ulcers in bedridden patients with defects of the skin and soft tissues, bedsores and fistulas in cancer patients receiving palliative treatment.

CardioOrganic® Omega-3

Dietary supplement based on terpenes



Composition: flaxseed oil, Siberian fir terpenes, alpha-tocopherol (vitamin E), capsule shell components: gelatin, glycerol as a humectant, water, potassium sorbate as a preservative, citric acid as an antioxidant.

CardioOrganic® Omega-3 is a dietary supplement that contains a source of Omega-3 polyunsaturated fatty acids (PUFAs), limonene, vitamin E, Siberian fir terpenes, and essential oils.

The substances comprising CardioOrganic significantly contribute to:

- ✓ reducing blood levels of total lipids, total cholesterol, triglycerides, low-density lipoproteins (LDL), and glucose;
- ✓ producing a choleretic effect;
- ✓ stimulating the excretion of cholesterol and bile acids with bile;
- ✓ lowering blood pressure;
- ✓ reducing aortic intima damage and its atherocalcinosis, preventing the development of myocardial infarction.
- ✓ reducing the biological age of blood vessels by 2.5 years*

*Maganova F, Voevoda M, Popov V and Moskalev A (2023), A prospective randomized comparative placebocontrolled double-blind study in two groups to assess the effect of the use of biologically active additives with Siberian fir terpenes for the biological age of a person. Front. Pharmacol. 14:1150504. doi: 10.3389/fphar.2023.1150504

CardioOrganic® Omega-3

Dietary supplement based on terpenes



THE PROPOSED TERPENOID FORMULATION CAN BE USED FOR DISEASES SUCH AS:

- Atherosclerosis of peripheral vessels
- Arterial hypertension
- Ischemic heart disease
- Type II diabetes mellitus and a range of other diseases caused by atherosclerosis
- For correcting disorders of lipid and carbohydrate metabolism in metabolic syndrome

CardioOrganic® Omega-3

Dietary supplement based on terpenes



Based on data from instrumental examination methods (Doppler ultrasound and applanation tonometry) obtained during a clinical study conducted at the Russian Gerontological Research and Clinical Center (Moscow), it was proven that taking the dietary supplement "CardioOrganic®" leads to a statistically significant reduction in **biological age by 2.5 years.**

In patients who took CardioOrganic for 3 months, the following was revealed:

- A statistically significant ($p < 0.001$) **decrease in the minimum value of the intima-media thickness on the right or left side**, i.e., an increase in the lumen of the carotid arteries and improved blood supply to the brain;
- **A reduction in pulse wave velocity (PWV), which led to increased vascular elasticity;**
- A statistically significant improvement on the **"General Health"** scale according to the SF-36 questionnaire.

Thus, evaluating the study data, it can be concluded that the "CardioOrganic®" dietary supplement possesses geroprotective properties, holds great promise for reducing biological age, and for the prevention and treatment of age-related cardiovascular system diseases.

VitaTerpen Active®

Dietary supplement based on terpenes



Composition: Sorbitol (carrier), Siberian fir terpenes, Flaxseed oil, Vitamin E (D-alpha tocopherol), Vitamin C (Ascorbic acid)

A natural hepatoprotector from the line of drugs based on natural Siberian fir terpenes, developed in a proliposomal form.

- ✓ The "VitaTerpen Active" dietary supplement contributes to improved liver and kidney function and normalization of metabolism.
- ✓ The natural Siberian fir terpenes included in the product promote bile outflow, improve bile properties, and prevent stone formation.

Vitaterpen Active®

Dietary supplement based on terpenes

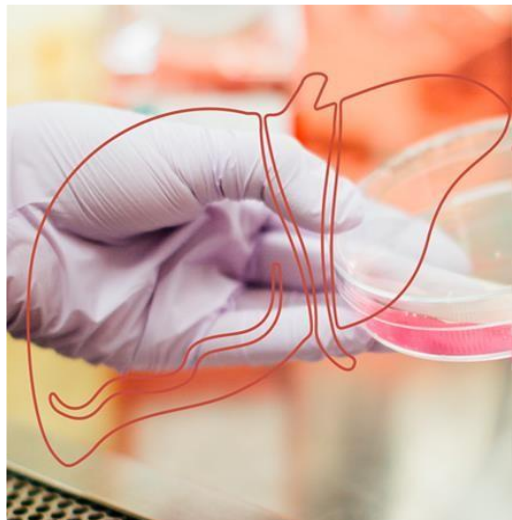


Experimentally Proven Effects of Siberian Fir Terpenes:*

- ✓ Protect the liver from the toxic effects of alcohol;
- ✓ Promote the restoration of liver cells;
- ✓ Prevent the development of liver fibrosis and fatty hepatosis;
- ✓ Normalize liver function, indicators of protein and bilirubin metabolism;
- ✓ Contribute to the normalization of liver function and metabolism in cases of liver damage, accelerate the regeneration and restoration of the functional activity of hepatocytes.

*Vyshtakalyuk A.B., Parfenov A.A., Maganova F.I., Latserus L.A. Izuchenie gepatoprotektrornoj aktivnosti terpensoderzhashchego preparata na modeli alkogol'nogo povrezhdeniya pecheni [Study of the hepatoprotective activity of a terpene-containing drug on a model of alcoholic liver damage] // RMZh, 2021. Klinicheskie rekomendatsii i algoritmy, P.1-4

ASSESSMENT OF THE EFFICACY OF "VITATERPEN ACTIVE" IN THE TREATMENT OF CHRONIC ALCOHOLIC STEATOHEPATITIS (CASH) WITH CHOLESTASIS SYNDROME



Based on the observation conducted at the therapeutic department of the Federal State Budgetary Institution "Clinical Hospital" of the Administrative Directorate of the President of the Russian Federation (Moscow), it was revealed that the terpene-containing drug "Vitaterpen Active®" produced positive dynamics in patients with chronic alcoholic steatohepatitis (CASH).

After a one-month course of "Vitaterpen Active®" according to the regimen of 3 capsules per day, a significant reduction was noted in:

- indicators of cytolysis (ALT, AST) and cholestasis in 90% of patients;
- liver fibrosis index in 50%;
- clinical manifestations of CASH in 35% of patients.

Good tolerability of the drug was noted, no side effects were detected, and the efficacy of the drug in the therapy of patients with CASH and cholestasis syndrome was confirmed.

Vitaterpen Active®

Dietary supplement based on terpenes



Specialists recommend the use of Vitaterpen Active:

- ✓ For the correction of carbohydrate and lipid metabolism disorders in metabolic syndrome;
- ✓ For the prevention of gastrointestinal disease risk;
- ✓ For maintaining and improving liver and kidney function, including in the prevention of cholelithiasis and nephrolithiasis*;
- ✓ As an auxiliary agent in the treatment of biliary and urinary tract diseases**;
- ✓ For the normalization of opportunistic intestinal microflora.

*Sivkov A.V., Cherepanova E.V., Shaderkina V.A. Primenenie fitopreparatov na osnove terpenov pri mochekamennoy bolezni [The use of terpene-based herbal medicines for urolithiasis]. Eksperimental'naya i klinicheskaya urologiya. 2011;(1):69-72.

** Petukhova S.V., Zverkov I.V., Bibova O.A., Rashitova E.L. Perspektivnyy gepatoprotektor prirodnogo proiskhozhdeniya na osnove terpenov v lechenii khronicheskogo alkohol'nogo gepatita [A promising natural origin hepatoprotector based on terpenes in the treatment of chronic alcoholic hepatitis]. RMZh. Meditsinskoe obozrenie. 2024;8(7):439-443. DOI: 10.32364/2587-6821-2024-8-7-11

Lipovitam Iod

Line of liposomal vitamins

Additional source of **IODINE, BETA-CAROTENE, VITAMIN E**



Composition: Sorbitol (carrier), kelp powder (source of iodine), flaxseed oil, beta-carotene, D-alpha tocopherol (Vitamin E), Tween-80 E433, L-ascorbic acid, capsule shell - "Halal" gelatin.

IODINE - an essential trace element for humans, necessary for the synthesis of thyroid hormones, which control the processes of brain and nervous system development and function, maintain body temperature, and regulate metabolism.

BETA-CAROTENE - (provitamin A) serves as a precursor to vitamin A (retinol) and is a powerful antioxidant. This substance also has immunostimulating and adaptogenic effects.

VITAMIN E - (tocopherol) is a physiological antioxidant, protects cell membranes, proteins, fats, and DNA by trapping free radicals and preventing their spread in the body.

Lipovitam D3

Line of liposomal vitamins

Additional source of **BETA-CAROTENE, VITAMIN E, D3**



Composition: flaxseed oil, D-alpha tocopherol (Vitamin E), beta-carotene, Tween-80 E433, L-ascorbic acid, cholecalciferol (Vitamin D3), capsule shell - "Halal" gelatin.

BETA-CAROTENE (provitamin A) - serves as a precursor to vitamin A (retinol) and is a powerful antioxidant. This substance also has immunostimulating and effects.

VITAMIN E (tocopherol) - is a physiological antioxidant, protects cell membranes, proteins, fats, and DNA by trapping free radicals and preventing their spread in the body.

VITAMIN D3 (cholecalciferol) - is essential for a strong and healthy immune system; promotes the activation of specialized white blood cells that absorb bacteria and viruses, increases resistance to various kinds of infections. Vitamin D3 regulates calcium-phosphorus metabolism in the body.

Lipovitam C

Line of liposomal vitamins

Additional source of **VITAMIN C and E**



VITAMIN C (ascorbic acid) - is one of the key micronutrients for the body. A powerful antioxidant that protects organ and tissue cells from free radical damage and activates the body's defense functions, accelerates the healing of wounds and scars.

This vital vitamin participates in the synthesis of collagen and elastin, hyaluronic acid, and many enzymes; it also improves the absorption of calcium, iron, and zinc, and affects the synthesis and metabolism of cholesterol.

Protein and carbohydrate metabolism depend on Vitamin C. It also accelerates the elimination of toxic substances from the body: lead, copper, mercury, vanadium. It helps strengthen blood vessels and increase the body's endurance, making it more resilient to stress.

VITAMIN E (tocopherol) - is a physiological antioxidant, protects cell membranes, proteins, fats, and DNA by trapping free radicals and preventing their spread in the body.

Lipovitam Black Seed

Line of liposomal vitamins

Composition: Sorbitol (carrier), black seed oil, beta-carotene, D-alpha tocopherol (Vitamin E), L-ascorbic acid, capsule shell - "Halal" gelatin.



Lipovitam Black Seed helps restore immunity and enhances the body's defense at the cellular level:

- ✓ Reduces the risk of inflammation transitioning to a chronic form;
- ✓ Alleviates the state of "chronic" fatigue, promotes the restoration of physical strength.
- ✓ Restores elasticity of the oral and esophageal mucosa;
- ✓ Used as an antioxidant during cytostatic therapy;
- ✓ Helps support reproductive function; increases sperm motility.
- ✓ Used to improve visual acuity: in the treatment of glaucoma and cataracts; protects the retina from harmful solar radiation.

AbiSaver®

Hygienic hand gel with Siberian fir terpenes



COMPOSITION: denatured ethyl alcohol (74.76% vol.), water, glycerin, Siberian fir terpenes, acrylates/C10-30 alkyl acrylate crosspolymer, aminomethyl propanol, DMDM hydantoin; alcohol content by weight 71.73%; by volume 74.76%

- ✓ The fresh and soft gel disinfects the skin, comfortably sanitizing it and cleansing it of pathogenic microorganisms, while preserving the hydrolipidic film. The skin's protective layer is not compromised.
- ✓ Siberian fir terpenes have a powerful antibacterial effect but are capable of removing microbes and impurities without harming the skin.
- ✓ After using **AbiSaver** gel, the skin remains perfectly clean and moisturized. Daily use does not lead to roughness; on the contrary, the natural components of the gel exhibit their best properties of delicate care.
- ✓ Can be used by children and adults. Does not contain artificial fragrances, triclosan, parabens, silicones, or other impurities.

SHELF LIFE: 36 months

New ABISIL® DENTAL Line

Therapeutic and prophylactic oral care products



ABISIL® DENTAL Toothpaste

For basic daily care of sensitive teeth and gums.



ABISIL® DENTAL Gum Gel

A necessary step for caring for gums showing signs of inflammation and bleeding. Maximum positive effect is achieved with the combined use of products from the **ABISIL® DENTAL** line.



ABISIL® DENTAL Elixir- Mouthwash

An effective addition to oral hygiene for more thorough cleaning and care when used in combination with other products from the **ABISIL® DENTAL** line.

BALSAMS based on Siberian fir terpenes

A line of cosmetic care products for external use.



In 2025, a new line of balsams based on terpenes is preparing for market launch:

- ✓ Natural cosmetic lip balm.
- ✓ Natural prophylactic nasal balm.
- ✓ Natural "FOCUS-ENERGY" balm for reducing fatigue and improving concentration.

WHAT WE OFFER

We are looking for a partner to introduce our scientific developments to the pharmaceutical markets of various countries.

We are ready to consider any forms of mutually beneficial cooperation, both regarding the entire intellectual property package and for individual areas.

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