Lorath Medical Nanomachine Compounds

Producer: Lorath Matriarchy Availability: Special Order, Prescription, and Physician Availability Price:

 Note: All prices listed are for export. Lorath Matriarchy citizens receive a 75% discount

- Nanomachine Compound: 25 KS Per 2oz vial, 400 KS Per liter
- Nanomachine Compound Bulk Order: 1,000 KS per gallon
- Tagging Compound: 5 KS Per 2oz vial
- Organic Material Compound: 10 KS Per one liter IV compatible container
- Reconstruction Nanomachine Compound: 5 KS Per 2oz Vial
- Standard Configuration Service Unit: 250 KS
- Field Service Unit: 50 KS
- Nanomachine Configuration & Storage Workstation/Desk: 10,000 KS
- Special Offer - Clinic Combination Package: Twenty gallons of nanomachine compound, twenty gallons of organic material compound, five gallons of tagging compound, twenty gallons of reconstruction machine compound, three standard configuration service units, five field service units, and one workstation/desk. 50,000 KS

Information

A nanomachine compound which can be configured to target skin cells, muscle tissues, organ tissues, and other specific forms of cell structures. This nanomachine compound then isolates the pre-designated cell type and begins to augment the structure and function of the cell to control multiple variables of the given tissue. Along with these nanomachines, doses of 'tagging' chemicals can be injected into specific locations on a recipients body to designate to the nanomachine compound where they should remain concentrated.

To increase the nanomachine's capabilities, the administration of organic nutrient and tissue compounds can be administered to provide 'construction' materials to the nanomachines to increase tissue size. Due to the high concentration of the injected chemicals, a small initial volume of material can be distributed to produce a larger volume increase in tissue growth.

A 'resetting' nanomachine dose can be prepared by analyzing the patient's DNA and RNA. This dose of nanomachines would return the receiving individual's tissues back to their original state by utilizing the original intended 'blueprints' for the individual's tissue structures.

Compound Configurations

The following is a listing of general nanomachine configurations. These configurations provide a general concept of how the nanomachines can be configured. However, a trained physician can further specify the intended result and extent of nanomachine application.

Organ Augmentation

The administered nanomachine dose can be directly placed into an organ structure. The pre-programmed nanomachines would then begin to interact with cell and tissue structures to manipulate organ function. Nanomachines applied can be configured to simply improve and regulate the organ's function, or to produce specific effects. Additionally, applied nanomachines can increase organ size if programmed to do so.

Intended Effects

- Organ function increase/decrease/regulation
- Organ tissue health improvement
- Organ tissue increase/decrease in volume

Muscle Augmentation

An administered nanomachine dose can be configured to interact with muscle tissues. When programmed to interact with muscle tissues, the administered nanomachines interact with muscle fibers and cells to manipulate the tissue structure to produce increases or decreases in muscle fiber strength, pliability, overall health, and volume.

It is advised that tagging compounds be utilized to specify the intended muscle groups to be augmented. Additionally, a tagging compound can be applied to designate locations which are not to be augmented, such as the individual's heart.

Intended Effects

- Muscle tissue volume increase
- Muscle tissue durability improvement
- Muscle tissue function improvement
- Muscle tissue optimization in relation to density and volume
- Damaged muscle tissue repair

Skin Tissue Augmentation

When applied to skin-tissues externally or through the use of vapor injection spray devices, the nanomachine compound is designed to interact with the skin in a number of ways. Skin tissue cells and structure are manipulated by the nanomachines to produce increased pliability, durability improvement, pigmentation alteration (programmable), moisture levels, and when applied with organic tissue compounds, the skin of the individual can be increased in pliability to allow for the stretching of tissues, or can increase sub-epidermal pressures to reduce wrinkles and improve the firmness of the skin tissues.

Additionally, these nanomachines can be utilized to remove and repair blemishes, scars, moles, rash, minor burn irritation, and other skin abnormalities and irregularities.

Intended Effects

- Skin pigmentation improvement/alteration
- Skin moisture regulation
- Skin cell health improvement
- Skin texture improvement
- Skin pliability increase/decrease
- Cosmetic enhancements
- Skin tissue repair

Fatty Tissue & Cartilage Augmentation

Nanomachines can be injected into the fatty tissues of an individual. When applied to the fatty tissues when programmed to interact with the tissues, the nanomachine compound can deliver various results. Fatty tissues can be manipulated to produce improved pliability, decrease fat cell volume, release stored liquids and compounds at regulated intervals, or when nanomachines are applied in unison with organic material, the fatty tissues can be increased in volume. When applied to cartilage, the tissue structure can be manipulated in much the same way as regular fatty tissues.

Intended Effects

- Fatty tissue & cartilage volume increase/decrease
- Fat cell content regulation
- Fatty tissue & Cartilage health improvement.
- Cartilage repair
- Improved tissue pliability and durability
- Liquid content regulation

Ocular Organ Augmentation

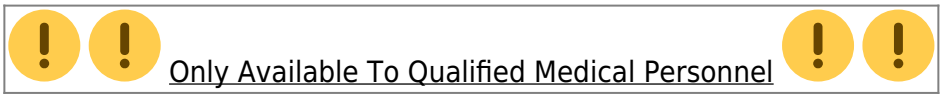
Programmed nanomachines can be applied to an individual's ocular organs to produce a number of results. Applied nanomachines are capable of interacting with the tissues of the individual's eye to improve the health of the tissues, remove interfering materials which would produce cataracts, augment visual capabilities, and even correct defects in eye structure. Along with being able to manipulate the tissues, the pressure within the eye can be regulated to relieve the effects of glaucoma. An additional cosmetic feature is available to alter eye color.

Applied nanomachines can also be programmed to interact with the optic nerves and muscles to improve eye movement, nerve function, and organ efficiency.

Intended Effects

- Improved tissue health
- Improved visual acuity
- Repair of defects
- Improved ocular function
- Eye pigment alteration

Brain & Nerve Tissue Augmentation



A very specialized variety of nanomachine can be applied to an individual's neural structures to produce a wide variety of effects, unfortunately, due to the precision required for the administration and regulation of this drug, it is available only to qualified professionals.

When applied to the neural tissues, these specialized nanomachines can be utilized to regulate nerve functions, regulate neural transmitters, regulate nerve responses, improve nerve tissue health, repair damaged tissues, remove harmful deposits of protein compounds which induce Alzheimer's, improve brain tissue function, optimize neural connections, and produce new cells.

These nanomachines can also be programmed to reproduce neural pathways which have been recorded by the Memory Storage Service and Neural Interface System. Also, the nanomachines can be utilized to repair Neural Processor Pack technology.

Intended Effects

- Repair of damaged nerves
- Repair of damaged brain tissues
- Repair of physical abnormalities which induce mental defect
- Improved brain function
- Improved nerve function
- Regulation of nerve function
- Optimize nerve and brain function
- Reproduce damaged brain tissues

Limitation

When being utilized to repair physical damages to brain tissue, there is a possibility of a loss of 5% of neural information due to the complexity of neural pathway construction.

Regulation

Very limited supplies of nanomachines configured to neural manipulation are produced by the Lorath Matriarchy. Availability is limited to highly trained medical personnel. Additionally, stored neural manipulation nanomachines have been designed to self-deteriorate after three days, thus making export and off-world distribution very difficult, as intended. Additionally, neural manipulation configured nanomachines are stored in an 'inactive' state, and must be exposed to a very specific magnetic frequency to be placed into an 'active' state, which also deactivates the self-deterioration process.

Hair, Nail, Feather & Related Augmentation

This nanomachine compound can be applied externally or internally to improve hair, hair, and feather growth, health, and pigmentation. These nanomachines function by increasing production of compounds which comprise the hair, nails, and feathers, and manipulating the tissues to produce the intended results. Additionally, these nanomachines can be applied with organic compounds to improve results.

Intended Effects

- Improved hair, nail, and feather health.
- Increased hair, nail, and feather growth.
- Alteration of hair, nail, and feather pigmentation.
- Alteration of hair, nail, and feather texture

Diseased Tissue & Harmful Material Removal

Specialized nanomachines can be applied to an individual to repair, remove, and destroy diseased tissues. These nanomachines can be programmed to target a wide range of abnormalities. Burned tissue, infections, cancerous tissues, tumors, and other physical abnormalities can be targeted by these machines and corrected to deliver improved health to the patient. Additionally, these nanomachines are capable of isolating viral and bacterial infections and neutralizing them, and capable of identifying and neutralizing toxic compounds.

Intended Effects

- Diseased tissue removal
- Damaged tissue removal
- Abnormal tissue removal
- Viral and bacterial neutralization
- Toxin neutralization

Administering The Drug

The nanomachine compound can be applied in a number of different ways, depending on the target structure to be manipulated.

Internal Application

When applying the nanomachine compound internally, the machines can be delivered in several methods depending on the target of the machines.

General Influence

When intending to spread the nanomachine material throughout an individual to effect the individual as whole, or to have the nanomachines target 'tagged' areas, it is suggested that the machines be administered into the bloodstream by injection or IV drip.

The nanomachine compound can also be delivered by means of suppository or concentrated inhalation.

Specific Target

When applying nanomachines to a specific organ or tissue structure, it is suggested that a specialized hypodermic needle with nanomachine distributor tubes be utilized to ensure proper application. Conventional hypodermic needles can be utilized as well for confined-location administration.

Shallow Target

When applying nanomachines to tissues or organs which are less than one half centimeter beneath the skin, a dermal vapor spray can be utilized to spray the nanomachines through the skin tissue and into the intended target area.

Advisory

It is advised that tagging compounds be utilized to specify intended and desired nanomachine manipulation locations. Tagging compounds will greatly improve nanomachine distribution and effect.

External Application

When applying the nanomachine compound externally, a number of less intrusive methods can be utilized to deliver results.

Ocular

When applying the nanomachine compound to the eyes, a 'dropper' and liquid suspension can be utilized to deliver the nanomachines onto the eye where they will then migrate through the tissues.

Skin, Hair, Nail & Other

When being utilized to effect external portions of the individual, the nanomachine compound can be applied as a 'creme' or 'gel' which can be rubbed into the intended location which is to be manipulated. An additional tagging compound can be utilized in the same method. It is highly advised that picoscopic filtering gloves be worn while handling the compound and areas not intended to be interacted with be covered or treated with a tagging compound which designates areas which are not to be manipulated.

To deliver targeted results, a vapor injection method can be utilized.

Shallow Target

To deliver nanomachines to shallow targets which are less than one centimeter beneath the epidermal layer, the nanomachines can be applied in a creme suspension which can be rubbed into the epidermis. However, a tagging compound must be injected by means of vapor injector system or hypodermic needle.

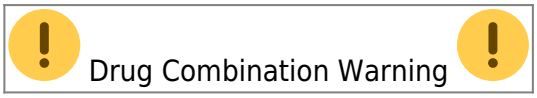
Side Effects

Side effects may become apparent when nanomachine compounds are applied. However, these side effects have been noted to rarely occur or last for very short durations while the individual adjusts to the nanomachine compound's influence:

- Minor fever
- Anxiety
- Irritation of tissues
- Nausea
- Temporary dizziness
- Temporary hallucinations
- Increased tissue sensitivity
- Headaches
- Sweating
- Muscle spasms
- Temporary depression

- Temporary manic state
- Increased or decreased libido
- Increased or decreased blood pressure
- Increased pulse
- Drowsiness
- Insomnia
- Bowel irritation
- Temporary inconsistence

Combination Note



When combined with Kaserine, nanomachine compounds will assist and augment the effect of kaserine. The result of this assist and augmentation is a 200% increase in kaserine potency, and a vastly improved tissue manipulation process. The result of a combination would be able to produce exaggerated kaserine results, flawless reproductive organ creation/augmentation, and increased health-improvement and tissue augmentation effects.

Configuration Methods

The nanomachine compound is able to be reconfigured and manipulated by several methods.

Electromagnetic Spectrum Exposure

Exposure to specific electromagnetic frequencies reconfigures the nanomachine structure, thus altering the nanomachine function. EM exposure must be for extended durations of at least five minutes to activate reconfiguration of the nanomachine compound. Additionally, prolonged exposure to random or mismatched electromagnetic frequencies results in break-down of the nanomachine compound.

Nanomachine Mixture

Multiple batches of nanomachines can be mixed together to produce tandem results if desired. Various ratios and mixtures may yield various results, however, the results can often be controlled by precision measurement of added nanomachines.

Tag Registering Compounds

A tag registering compound can be added to the dose of nanomachines to guide the nanomachines to

specific tissues, or other tagging chemicals. Tag registering compounds ensure that nanomachine dosages reach their intended position within the recipient.

Configuration & Production Tools

Note: All units include self-sterilizing picoscopic filtering gloves to prevent contamination or accidental absorption into skin tissues.

Standard Service Unit

The standard service unit is a four inch by eight inch device which can hold, preserve, and configure up to ten two ounce vials of nanomachine compound. The configuration tool itself contains the proper devices to manipulate, mix, and configure the nanomachine compounds which are to be used. The device also includes a built in computing device, touch-screen interface, and neural link compatibility to allow for an operator to control the unit. The configuration tool also includes a database of nanomachine configurations and their intended effects which can then be applied to the nanomachines held within the device.

Field Service Unit

The field service unit is a five inch by two inch device which is capable of holding, preserving, mixing, and configuring up to three two ounce vials of nanomachine compound. The field service unit also includes a replaceable injector assembly. The field service unit has a built in interface screen and selector dial to configure the nanomachines to several dozen common configurations for in-field usage. However, the database within the unit can be altered to have alternative configurations available.

Stationary Unit

The stationary unit for nanomachine operations is a stand-alone unit which is built to be one meter in width, a half meter in length, and three fourths a meter in height. This unit can be utilized as a desk in a hospital, clinic, or doctor's office and is available in many ascetic designs. The stationary unit is capable of hoDocTomoelding, preserving, mixing, and configuring up to one hundred two ounce vials, and ten one liter containers. These units can also be built to produce the nanomachine compounds themselves, however, the unit is not able to produce the brain-tissue manipulating form of nanomachine, but can produce simple-nerve manipulation nanomachines. Each unit has a full database in regard to nanomachine configuration parameters, and can produce four liters of nanomachine material a day by utilizing picoscopic constructor systems.

Manufacturing Unit

The nanomachine manufacturing unit is a unit designed to be kept in secure locations such as regulated

Lorath Matriarchy research facilities, regulated pharmaceutical plants, and LSDF hospital complexes. These manufacturing units are two meters in hight, three meters in width, and four meters in length and are weighted and anchored to prevent theft. Manufacturing units are capable of manipulating every facet of the nanomachine compound, and can produce fifty gallons of nanomachine compounds a day. Each unit includes a computer console work-station, a neural interface system, and sample analysis system. Additionally, each unit is designed to have a neural lock system, password system, pico-jelly key system, 30-character pass-code, and biometric data analysis system which serve as a security lock system. Before the system can be utilized in any way, each locking mechanism must be in a secure and unlocked state. Manufacturing units automatically return to a locked state after thirty seconds of inactivity. If the unit is tampered with while in a locked state, all data within the machine will be wiped and the machine will isolate itself from all networks until a service representative can be dispatched to re-initialize the system.

OOC Notes

Authored by DocTomoe and approved by Andrew on Apr 6, 2008 [1)]

1)
https://stararmy.com/roleplay-forum/index.php?threads/lorath-medical-nanomachines.1980/