

Pyo Bacteriophage

Product description

Name of the pharmaceutical product (Patentable):

Pyo bacteriophage

Georgian pharmaceutical product registration number: **R-022600**

Composition:

Pyo bacteriophage is a combined preparation. Pyo bacteriophage is a mix of sterile filtrates of phage lysates active to:

- *Staphylococcus* titter no less than 10^5 ml⁻¹,
- *Streptococcus* titter no less than 10^4 ml⁻¹,
- Different types of *E. coli* titter no less than 10^5 ml⁻¹,
- *Pseudomonas aeruginosa* titter no less than 10^5 ml⁻¹,
- *Proteus* (*mirabilis* and *vulgaris*) titter no less than 10^5 ml⁻¹,

Inactive ingredients: Bacteriological growth medium, standard sodium saline. Chinazolin as a conservator.

Description:

Preparation is transparent liquid, with yellow to light brown colour.

Pharmaco-therapeutical group:

Specific antibacterial solution.

Pharmacological actions:

Pyo bacteriophage leads to a specific lysis of bacteria belonging to: *Staphylococcus* (*S. aureus*), *Streptococcus* (*S.pyogenes*, *S. sanguis*, *S.salivarius*, *S. agalactiae*), *E.coli* (Different types), *Pseudomonas Aeruginosa*, *Proteus* (*Mirabilis* and *Vulgaris*) species.

Prescription:

Pyo bacteriophage is used in the treatment and prophylaxis of purulent inflammatory and enteric infectious diseases caused by above enlisted microorganisms.

Indications:

- Otorhinolaryngeal and respiratory bacterial infections including: rhinitis, otitis, paranasal sinusitis, pyogenic tonsillitis, pharyngitis, laryngitis, tracheitis, bronchitis, pneumonia, pleuritic;
- Dermatological bacterial infections including: pyoderma, abscesses, furunculi and carbuncles, hydradentitis;
- Surgical site bacterial infections including: infectious wounds, mastitis, flegms;
- Oral bacterial infections including: stomatitis, gingivitis, periodontitis and other;
- Ocular bacterial infections including: conjunctivitis, blepharitis;
- Burn wounds with secondary bacterial infections
- Urogenital and gynecological infections: Urethritis, cystitis, pyelonephritis, colpitis, endometritis;
- Gastrointestinal bacterial infections including: gastroenterocolitis, dysbacteriosis (bacterial overgrowth syndrome), paraproctitis;
- Omphalitis of newborn, purulent septic infections in children (including newborn);
- Infectious diseases lead by *Staphylococcus* (*S. aureus*), *Streptococcus* (*S. pyogenes*, *S. sanguis*, *S. salivarius*, *S. agalactiae*), *E. coli* (Different types), *Pseudomonas Aeruginosa*, *Proteus* (*Mirabilis* and *Vulgaris*) bacteria;



PYO
BACTERIOPHAGE

ANTIBACTERIAL SOLUTION FOR TOPICAL AND ORAL USE

10 ml x 5

Bacteriophages active against (titre per ml):
Staphylococcus (10^5), *Streptococcus* (10^4),
Proteus (10^5), *Esherichia coli* (10^5), *Pseudomonas* (10^5)

Preparations developed by
GEORGE ELIAVA INSTITUTE
OF BACTERIOPHAGES, MICROBIOLOGY AND VIROLOGY



- Prophylactic purposes against post-operational complications and hospital infections;

Usage and dosage:

Optimal results are achieved when Pyo bacteriophage is used at the onset of infection and when introduced directly to the infection site. Pyo bacteriophage is used as a disinfecting agent by phage soaked bandages applied directly into a cavity (wound, including abscess, abdominal, pleural, nasal, urinary bladder, uterine, vaginal) The preparation may be used orally *per os*, and/or by urinary catheter or rectally *per rectum* via enema.

- Local application of Pyo bacteriophage is performed daily during 3-5 day period, three times a day. Amount of the preparation is determined by the size of the affected area. If various chemical antiseptics were used to treat the wound before phage application, it should be cleaned by sterile saline solution and 2-3% soda solution should be applied.

- For treatment of abscesses, pleuritis, arthritis, and peritonitis, 50-200ml of Pyo bacteriophage may be instilled directly into the cavity, every other day. (Exact amount of applied phage is determined based on the size of cavity) Before instillation of bacteriophages, pus from cavities should be extracted.

- For cystitis and pyelonephritis Pyo bacteriophage may be administered via urinary catheter or *per os*;

- During cholecystitis, Pyobacteriophage can be applied through intubation with amount of 30 ml every other day.

- In case of stomach surgery or peritonitis, 100ml phage is applied in cavity, daily during 3-4 days. In case of application through catheter 30ml phage is applied daily during 3-4 days.

- For treatment of deep forms of pyoderma. Intradermal injection may be used (0.1-0.5 ml per injection) up to maximum of 10 injections during 24 hours.

- For conjunctivitis, Pyo bacteriophage is instilled via pipette, 2 drops in each eye, 4-6 times daily during 3-5 days.

- In cases of neonatal omphalitis and pyoderma, application is by Phage soaked bandage twice daily for 5-7 days.

During Per os application of Pyobacteriophage in adults and children from age of 3, drinking of 2-3% baking soda solution (one glass, 150-250 ml) is recommended.

Special Warnings:

Before use, the vial should be well shaken. The contents should be transparent liquid without sediment. The preparation should not be used in case of vials damage or if the liquid inside is non-transparent! Do not store and use the drug after destroying the integrity of the vial!!!

Overdosing:

During the usage of Pyo bacteriophage, overdosing symptoms have not been revealed.

Contradictions:

Usage of Pyo bacteriophage does not have contradictions.

Side effects:

No side effects have been revealed during usage of Pyo bacteriophage.

Usage together with other preparations:

The preparation can be used in parallel or supplemental to other medications. Drinking alcohol during treatment with bacteriophages is not recommended.

Specific categories of patients:

Pregnancy and lactation:

Preparation can be used during pregnancy and lactation period.

Usage in elderly people:

Preparation is used in elderly people.

Effect on drivers and people working with potentially harmful machines:

Usage of bacteriophages does not affect driving skills or skills of other equipment usage.

Packaging:

Pyo bacteriophage is produced in 10 ml vials (5 vials per pack).

Storage conditions and shelf life:

Store at +2C⁰ - +8C⁰ in dry place, protected from direct light.

Shelf life 18 month.

Preparation developed by G. Eliava Institute of Bacteriophages, Microbiology and Virology.

Manufactured by:

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