

# Cereton®

**International Non-Proprietary Name (INN):** Choline alfoscerate

**Dosage Form:** solution for intravenous and intramuscular injections

**Structure:** 1 ampoule (4 ml) contains:

*Active ingredient:* choline alfoscerate polyhydrate (on an anhydrous choline alfoscerate basis) 1000 mg.

*Excipients:* water for injections

**Description:** clear, colourless liquid

**Pharmacological Classification:** nootropics

**ATX Code:** N07AX02

**Pharmacological Action:** nootropic

**Pharmacodynamics:**

Nootropic medicine. Central cholinostimulator, which contains 40.5% of metabolically protected choline. Metabolic protection facilitates the release of choline in the brain. Provides the synthesis of acetylcholine and phosphatidylcholine in neuronal membranes, improves the blood flow and enhances metabolic processes in the central nervous system, activates the reticular formation. Increases the linear velocity of blood flow on the side of a traumatic brain injury, promotes normalization of spatiotemporal characteristics of spontaneous bioelectric activity of the brain, regression of local neurological symptoms and restoration of consciousness; has a positive effect on the cognitive and behavioural responses of patients with cerebrovascular diseases (discirculatory encephalopathy and residual effects of cerebral circulation disorders). Provides a preventive and corrective effect

on the pathogenetic factors of the involitional psychoorganic syndrome; changes the phospholipid composition of neuronal membranes and reduces the cholinergic activity. Stimulates dose-dependent ejection of acetylcholine under physiological conditions; participating in the synthesis of phosphatidylcholine (membrane phospholipid) it improves the synaptic transmission, plasticity of neuronal membranes and receptors' function. Does not affect the reproductive cycle and does not have a teratogenic, mutagenic effect.

**Pharmacokinetics:**

Easily penetrates through the blood-brain barrier, 85% of the medicine is excreted by the lungs in the form of carbon dioxide; the rest (15%) is excreted by the kidneys and through the intestine.

**Intended Uses:**

- The acute and recovery period after a severe craniocerebral injury and an ischemic stroke, the recovery period after a hemorrhagic stroke, with local hemispheric symptoms or symptoms of brainstem lesion;
- psychoorganic syndrome against the degenerative and involuntary changes in the brain;
- cognitive disorders (impaired mental and memory function, confusion, disorientation, decreased motivation, initiative and ability to concentrate), including cases of dementia and encephalopathy;
- senile pseudo melancholia.

**Contraindications:**

- Hypersensitivity to the medicine or its ingredients;
- acute stage of hemorrhagic stroke;
- pregnancy;
- breastfeeding;
- age under 18 years old.

### **Dosage and Administration:**

In acute conditions the medicine is administered intravenously (slowly) or deeply intramuscularly (slowly) at a dose of 1000 mg (1 ampoule) a day for 10-15 days.

### **Side Effects:**

*The digestive tract:* constipation, diarrhea, dry mouth, pharyngitis.

*The central nervous system:* headache, drowsiness, insomnia, agitation, anxiety, aggression, brain ischemia, dizziness, convulsions.

*Dermatological reactions:* rashes, urticaria.

*Other:* pain in the area of injection, increased urination.

*Allergic reactions* are possible.

Nausea is possible (mainly because of dopaminergic activation).

In this case, the dosage of administration should be reduced.

### **Overdose:**

Symptoms: nausea. Treatment: symptomatic therapy.

### **Interaction with Other Drugs:**

No significant interaction with other medicines has been identified.

### **Pregnancy and Lactation:**

The drug is contraindicated during pregnancy and lactation.

### **Influence on the Ability to Drive Vehicles and Mechanisms:**

Cereton does not affect the speed of psychomotor reactions.

**Terms of Release from Pharmacy:** on prescription

**Storage Conditions:** Store in a dark place at a temperature no higher than 25°C. Keep out of reach of children.

**Shelf Life:** 5 years. Do not use beyond the expiration date.

**Country of Manufacture:** Russia