

COGNITIVE & NEUROPROTECTION

Semax

Sharper focus, protected mind



Potential benefits

- ✓ Sharpens focus & concentration
- ✓ Supports memory & learning
- ✓ Neuroprotection during stress & fatigue
- ✓ Lifts mood & mental clarity
- ✓ Aids recovery of cognitive function

AVAILABLE AS

Injection

Nasal Spray

Semax

ACTH(4-10) Heptapeptide Analog (BDNF-elevating nootropic / neuroprotective)

Schedule: Rx only (compounded)

Route: Intranasal / Subcutaneous

Dosage Form: Nasal spray, sterile injection

Compounding Standard: USP 797 sterile compounded

1. Medication Identification

Synthetic heptapeptide analog of ACTH(4-7). PCI Pharmacy formulations: 7.5 mg/mL intranasal spray in 10 mL bottles and 2.5 mg/mL sterile injection in 3 mL vials.

2. Indication / Therapeutic Use

Off-label support for cognitive performance, focus, neuroprotection, and recovery from neurologic insult (used clinically in Russia for stroke and cognitive decline).

3. Dosing and Administration

Intranasal: 750 mcg per spray, one spray per nostril daily

Injectable: 250 mcg subcutaneous

Timing: Morning, 5 days per week

Duration: Per prescriber protocol; typical course 4 to 8 weeks

What to do if a dose is missed: Administer/Take your next dose when you remember. If within 12 hours of your next scheduled dose, skip the dose and take your next dose as scheduled. Do not double dose to compensate for a missed dose.

4. Mechanism of Action / Pharmacology

Potently upregulates BDNF and TrkB expression in the hippocampus, driving neuroplasticity and neurogenesis. Modulates serotonergic, dopaminergic, and adrenergic pathways governing focus, mood, and attention.

5. Contraindications

- ☐ Hypersensitivity to Semax or excipients
- ☐ Pregnancy or lactation
- ☐ Uncontrolled psychiatric conditions
- ☐ Active CNS bleeding or recent intracranial procedure

6. Warnings and Precautions

- ☐ Mild stimulation possible initially; counsel on timing earlier in the day
- ☐ May affect mood and sleep; monitor in patients with psychiatric history
- ☐ Not FDA approved in the United States

7. Adverse Reactions

- ☐ Brief nasal irritation (BDNF activation, expected days 1 to 4)
- ☐ Mild stimulation early in therapy
- ☐ Otherwise well tolerated

8. Drug Interactions

- ☐ Caution with SSRIs, SNRIs, MAOIs (serotonergic modulation)
- ☐ Caution with CNS stimulants and dopaminergic agents
- ☐ Counsel against use with other intranasal cognitive agents

9. Storage, Stability, and Beyond-Use Date

Visually inspect vial to ensure no precipitants, damage or cloudy liquid remains. Injectable and Intranasal: refrigerated at 35 – 42 degrees Fahrenheit, do not freeze, protected from light.

Beyond-use date per pharmacy SOP and USP 797 guidance.

10. Compounding and Dispensing Notes

Sterile compounded injectable prepared under USP 797 conditions. Intranasal compounded per USP 795. Document lot, BUD, and patient-specific Rx.