

SEMAX

Overview

Semax is a synthetic peptide derived from a fragment of adrenocorticotrophic hormone (ACTH). Developed in Russia during the 1980s, it is primarily recognized for its potential cognitive-enhancing and neuroprotective properties. In Russia and Ukraine, Semax is approved for medical use in treating conditions such as ischemic stroke, cognitive disorders, and optic nerve atrophy.

What Does SEMAX Do?

Semax is designed to cross the blood-brain barrier effectively. Once in the central nervous system, it modulates neurotransmitters like dopamine and serotonin, which are crucial for mood, attention, and memory. Additionally, Semax promotes the production of brain-derived neurotrophic factor (BDNF) and nerve growth factor (NGF), both essential for neuron health and cognitive function.

Potential Benefits of SEMAX

1. Cognitive Enhancement

- **Memory Improvement:** Semax has been shown to enhance memory retention, making it useful for tasks requiring long-term recall.
- **Increased Learning Capacity:** It may help with faster learning, useful in both academic and high-performance settings.
- **Attention and Focus:** Users often report improved concentration and attention span, aiding in tasks requiring sustained focus.

2. Mood Regulation

- **Antidepressant Effects:** Semax may help regulate mood by increasing dopamine and serotonin levels, providing relief from symptoms of depression and anxiety.
- **Reduced Mental Fatigue:** It is known to help manage stress and mental exhaustion, making it popular among people experiencing burnout.

3. Neuroprotection

- **Protects Brain Cells:** By increasing brain-derived neurotrophic factor (BDNF) and nerve growth factor (NGF), Semax supports the survival and growth of neurons.

- **Stroke Recovery:** In Russia, Semax is sometimes prescribed after a stroke, as it may aid in neuroregeneration and functional recovery.

4. Increased Physical and Mental Stamina

- **Enhanced Physical Endurance:** Some users report better energy levels and resilience to physical and mental stressors.
- **Support for Stressful Situations:** It is often used by individuals in high-pressure roles to maintain mental and physical performance under stress.

5. Potential Eye Health Benefits

- **Optic Nerve Support:** Semax may support optic nerve health and has been explored in treatments for optic nerve atrophy in some regions.
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Potential Side Effects

Semax is generally considered safe and well-tolerated, but like any compound, it can have side effects, particularly if taken in high doses or used improperly. Here are some potential side effects:

1. Increased Blood Pressure

- **Blood Pressure Spikes:** Semax may cause temporary increases in blood pressure, especially at higher doses, which could be problematic for individuals with hypertension.

2. Irritability or Mood Changes

- **Emotional Sensitivity:** Some users report feeling more irritable or sensitive after using Semax, potentially due to its influence on dopamine and other neurotransmitters. This can occur when the medication wears off as well.

3. Headache

- **Mild to Moderate Headaches:** Headaches can occur in some users, particularly when starting a regimen or using higher doses than recommended.

4. Allergic Reactions

- **Nasal Irritation:** Since Semax is often administered as a nasal spray, it can sometimes cause irritation in the nasal passages.
- **Other Allergic Symptoms:** Though rare, some people may experience mild allergic reactions such as itching, sneezing, or a runny nose.

5. Sleep Disturbances

- **Insomnia or Restlessness:** Some people report difficulty sleeping if they use Semax too close to bedtime, likely due to its stimulating effects.

6. Digestive Discomfort (Rare)

- **Nausea or Stomach Upset:** Although uncommon, some individuals may experience mild digestive issues, especially when using higher doses.

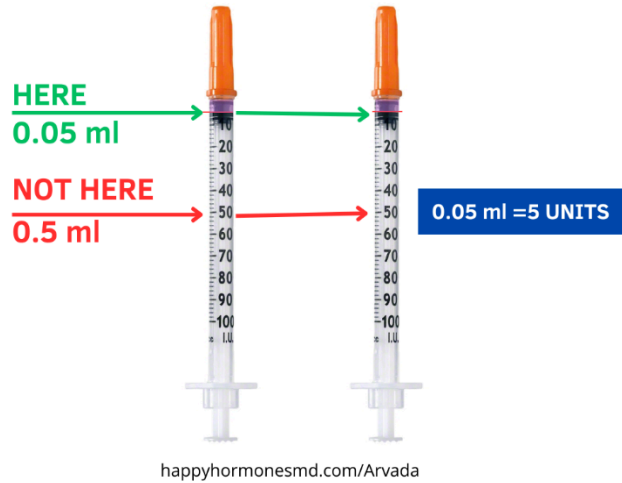
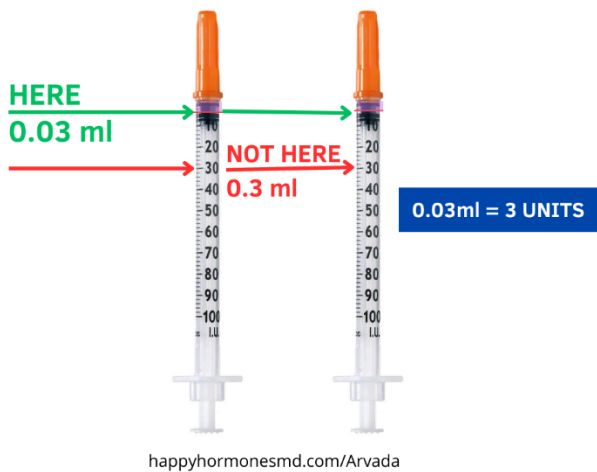
While these side effects are typically mild and resolve after discontinuing use, it's best to start with a low dose to gauge individual tolerance.

Dosage Information

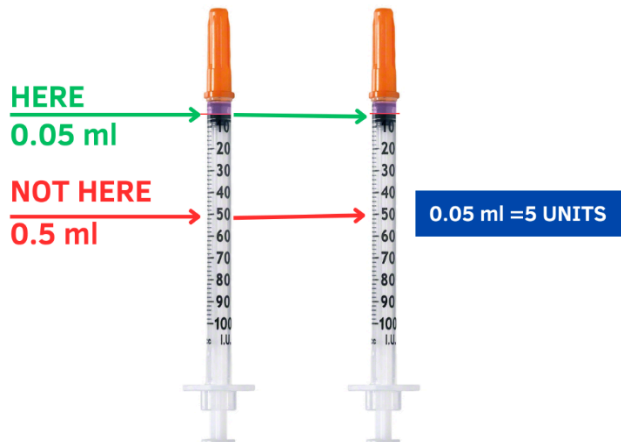
Semax 10mg Vial

General Dose: 0.5 - 1mg (0.03ml – 0.05ml or 3 - 5 units) SQ every AM in a fasted state. May split dose into AM and afternoon. **1 vial lasts 10-20 days.**

0.03ml - 3 units (Not 30 UNITS)



Post Stroke: 1mg (0.05ml or 5 units) SQ 4x/day for 10 days. **10 days requires 4 vials**

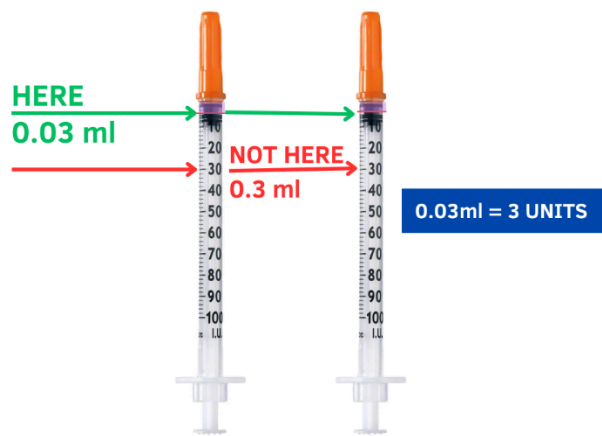


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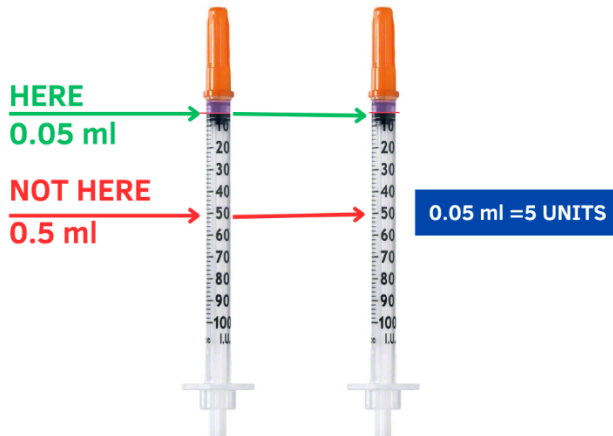
Semax 40mg Vial

General Dose: 0.5 - 1mg (0.03ml – 0.05ml or 3 - 5 units) SQ every AM Mon – Fri, preferably in a fasted state. May split dose into AM and afternoon. 1 vial lasts 40-80 days.

0.03ml - 3 units (Not 30 UNITS)

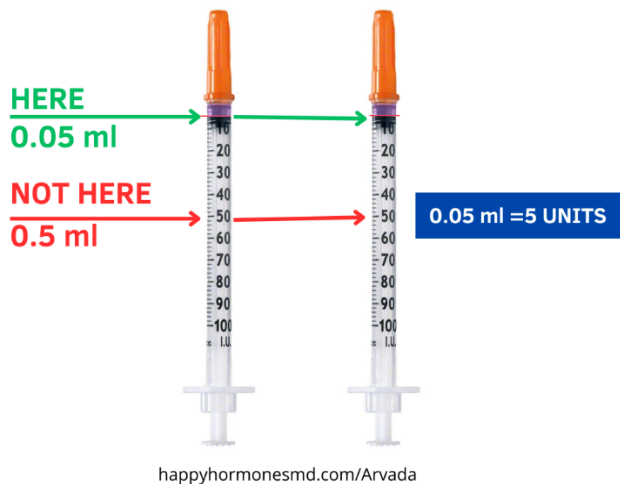


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Post Stroke: 1mg (0.05ml or 5 units) SQ 4x/day for 10 days. 10 days requires 1 vial



Cost

SEMAX is currently only available as a research peptide. Please see document titled “Research Peptide Information” in the Education Folder under Records in the patient portal.

SEMAX 10mg Vial

- \$98.50 (Includes shipping and bacteriostatic water for reconstitution).

SEMAX 40mg Vial

- \$158.50 (Includes shipping and bacteriostatic water for reconstitution).

Reconstitution Instructions

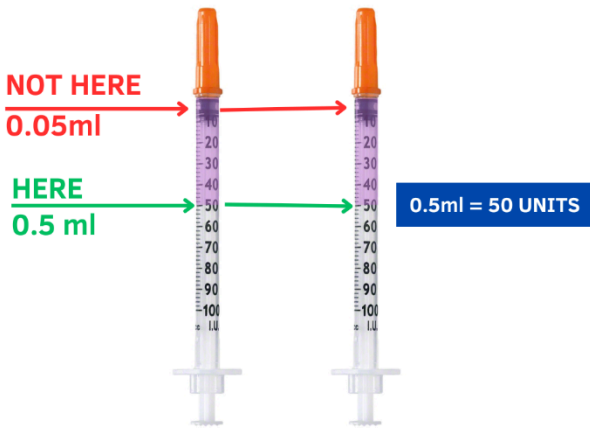
IMPORTANT:

- Follow the instructions below regarding the amount of bacteriostatic water to use when reconstituting the peptide. **DO NOT** follow the instructions that come with the peptide.
- Be sure to follow the instructions for the size vial you have.
- **Do NOT** throw away the vial of bacteriostatic water!!! It is a multiuse vial and can be used for your next order!

SEMAX 10mg Vial

- Inject **0.5ml of bacteriostatic water** into the vial of powder (**0.5ml = 50 units**).

0.5ml - 50 units (Not 5 UNITS)

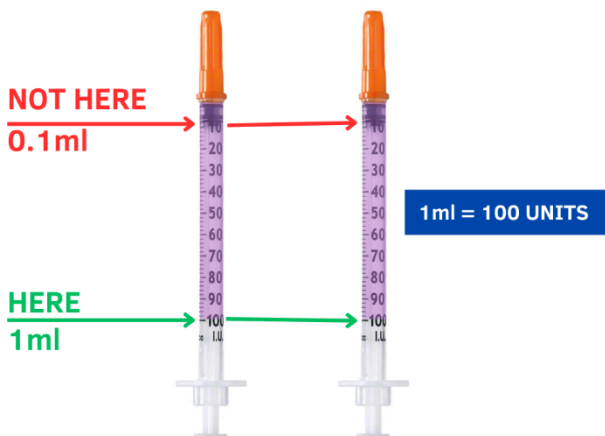


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SEMAX 40mg Vial

Inject **2ml of bacteriostatic water** into the vial of powder (**2ml = 200 units**). You will need to inject 2 full syringes of 100 units of water into the vial.

1 ml - 100 units (Not 10 UNITS)



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- See the **document** titled *“Reconstituting Medications in Powder Form”* in the Education Folder in the patient portal.
- See the following **Instructional videos** in the Education Folder in the patient portal:
 - *“Reconstituting Powdered Medications”*

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- *“Injection Video – Introduction”*
 - *“Injection Video – Drawing Up the Medication”*
 - *“Injection Video – Administering the Medication”*
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Storage and Stability

- Vials are shipped as lyophilized powder, requiring no refrigeration during shipping.
 - In Lyophilized Form:
 - Stable for up to 3 years in the freezer and 2 years in the refrigerator.
 - Protect from light.
 - Once Reconstituted:
 - Stable for 6 weeks.
 - Must be refrigerated and kept away from light.
 - Avoid placing vials in the refrigerator door to prevent degradation from frequent temperature changes.
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Important Disclosures

- These statements have not been evaluated by the US Food and Drug Administration (FDA).
 - SEMAX is not intended to diagnose, treat, cure, or prevent any disease.
 - Compounded drugs and research peptides are not FDA-approved but are produced under strict quality control measures.
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Quality Assurance

- All peptides are subjected to third-party testing with publicly available Certificates of Analysis (COA).
- Testing includes:
 - RP-HPLC (Reversed-Phase High-Performance Liquid Chromatography)
 - Mass Spectrometry (MS)
 - Sterility Testing
 - Additional tests meeting or exceeding U.S. Pharmacopeia (USP) and USP-National Formulary (NF) regulations.

The manufacturer ensures quality, safety, and efficacy, complying with regulatory standards.

