

What epitalon is

A four-amino-acid peptide, Ala-Glu-Asp-Gly, designed in the 1980s by Khavinson's group in Leningrad as a synthetic stand-in for a pineal gland extract. Its reputation rests on a telomerase result in cultured cells, a melatonin claim, and elderly Russian cohorts given the extract for years.

HUMAN EVIDENCE	Small Russian trials and cohorts from one institute, mostly of the extract; one independent cell-line replication (2025); no independent human study; no sleep study of any kind
FORMS	Research vials of 10 and 50 mg; registered in Russia; no approved or compounded product in the US
PRICE	\$30–\$55 per 10 mg, \$120–\$150 per 50 mg; a course is 50–100 mg
STATUS	Not approved. Advisory committee voted 7–4 in July 2026 to recommend it for compounding, against FDA staff; FDA has not acted
ANTI-DOPING	Prohibited at all times (SO)

ONE INSTITUTE

Nearly every human result carries the same names: Khavinson, Morozov, Anisimov, Korkushko. Not proof the work is wrong; the reason a forty-year-old claim is unconfirmed in people. The one outside replication, 2025, is in a dish.

This pamphlet is for adults using or being offered epitalon. It is a summary of the published record, not medical advice.

Before the first course, ask

- ☐ If it is sleep: do I know no sleep study of epitalon exists?
- ☐ Do I understand the evidence comes from one institute and was never repeated?
- ☐ Cancer, or a cancer history? Telomerase is the reason to ask.
- ☐ What is the concentration, and my dose in units?
- ☐ Is there an independent certificate of analysis for this lot?
- ☐ Am I tested? It is prohibited at all times.
- ☐ Have I tried the things with trials first?

SOURCES

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7. Anisimov VN, Khavinson VKh. Peptide bioregulation of aging: results and prospects. Biogerontology. 2010;11(2):139-149.
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10. Al-Dulaimi S, Thomas R, Matta S, Roberts T. Epitalon increases telomere length in human cell lines through telomerase upregulation or ALT activity. Biogerontology. 2025;26(5). doi:10.1007/s10522-025-10315-x (correction, November 2025).

This guide is an educational summary of published sources and is not medical advice. Epitalon has no approved form anywhere outside Russia and no independently replicated human trial; every vial sold in the United States is an unapproved drug of unverified identity, strength, and sterility. The courses described are reported as sellers describe them, not recommended. Status statements are current as of the edition date.

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READER'S GUIDE

Epitalon

A guide to the pineal tetrapeptide: forty years of work from one St. Petersburg institute, a telomerase result in a dish, and a July 2026 committee vote on an indication no study has tested

Epitalon (also spelled epithalon or epithalone) is a four-amino-acid peptide, Ala-Glu-Asp-Gly, designed in the 1980s by Vladimir Khavinson's group in Leningrad as a synthetic stand-in for an extract of the pineal gland. Its reputation rests on three claims: that it switches on telomerase in human cells, that it restores melatonin rhythm in the old, and that the pineal preparations lengthened the lives of elderly Russians followed for years. This guide covers what those studies were and who ran them, why almost none has been repeated outside that institute, how the vials are dosed, and what the FDA's advisory committee decided in July 2026 for insomnia, a use FDA's reviewers found no human study of at all.

What the studies have shown

THE EVIDENCE, BY KIND		
STUDY	RESULT	CATCH
Cells, 2003 and 2025	Telomerase on; telomeres longer, cancer cells too	In a dish; one outside group
Mice, 2003	Slower aging markers, fewer tumors; lifespan unchanged	Same institute
266 elderly, 2003	Lower mortality over 6–8 years	The extract, unblinded
Elderly, 2006	Better function and melatonin rhythm	As above
Any sleep study	None	The nominated use

O⁵
Human studies of epitalon in insomnia, by any sleep measure, per FDA's July 2026 review

7–4^{5,6}
Committee vote to recommend it, one abstaining, against FDA staff's advice

TELOMERASE, IN A DISH AND IN A PERSON
No human study has measured telomere length before and after epitalon. A 2025 UK cell study repeated the result and saw breast cancer cells' telomeres lengthen too; cancer safety data in people do not exist.

How it is dosed, and the July 2026 vote

SELLER COURSE FOR A 10 MG VIAL + 1 ML (10 MG/ML). NO TRIAL. SUBCUTANEOUS, DAILY.			
DAYS	DOSE	UNITS	PER COURSE
1–10	10 mg daily	100	100 mg
or 1–20	5 mg daily	50	100 mg
Then	4–6 months off		

Modeled on the Russian short courses of the extract; no human dose-finding for the tetrapeptide. A 50 mg vial with 2 mL is 25 mg/mL: 10 mg is 40 units.

FDA STAFF, JULY 2026
Recommended against: no human sleep study; one laboratory, much of it in Russian; safety and characterization uncertain

COMMITTEE
Voted 7–4 to recommend anyway, with BPC-157, TB-500, KPV, MOTS-c, Semax

TODAY
Not approved; not compoundable until FDA acts by rulemaking; the vial remains an unapproved drug

READING THE HEADLINE
Sellers report the vote as FDA recognizing epitalon for sleep. The reviewers could find no sleep study; a panel recommended listing it anyway.

Units, and what is not known

UNITS = (MG ÷ MG/ML) × 100
10 mg with 1 mL is 10 mg/mL: 5 mg is 50 units, 10 mg is 100. Write the concentration on the vial; the 50 mg vial changes it.

ILLUSTRATION ONLY		
VIAL + WATER	5 MG	10 MG
10 mg + 1 mL	50 units	100 units
50 mg + 2 mL	20 units	40 units

- Reported: the Russian papers list no significant adverse effects, briefly and unblinded; forums describe site soreness, drowsiness, vivid dreams.
- Telomerase: in the 2025 cell study it lengthened breast cancer cells' telomeres too. No cancer safety data in people.
- Hormonal effects on melatonin, gonadotropins, and cortisol were measured in small groups by the same institute.
- Not in pregnancy, under 18, or with a cancer history.
- A tetrapeptide is cheap to make and hard to verify without testing.

WHAT DOES HAVE EVIDENCE
For insomnia: cognitive behavioral therapy, then the approved drugs. For aging: exercise, sleep, not smoking. Over-the-counter melatonin has more human data than the peptide sold to restore it.