

What sermorelin is

The first 29 amino acids of growth hormone-releasing hormone, the shortest fragment that still triggers a growth hormone pulse. The parent of tesamorelin and of the CJC-1295 in blend vials.

BRAND HISTORY Geref Diagnostic (1990), Geref for children (1997); both withdrawn in 2008 for commercial reasons

APPROVED FOR Nothing today. No approved product exists; the old approval was for children.

FORMS Compounded vials on a prescription; research vials, which are unapproved drugs

ANTI-DOPING Banned by WADA at all times

APPROVED ONCE, THEN OUTCOMPETED

Geref helped children grow, but growth hormone itself worked better and the product left the market. The adult wellness use never had a label or a trial program. What it has is a legal opening.

This pamphlet is for adults using or being offered sermorelin for sleep, recovery, body composition, or anti-aging. It is a summary of the old label and the trials, not medical advice.

Before using sermorelin, ask

- ☐ Pharmacy-compounded on a prescription, or a research vial? Is the beyond-use date on the label?
- ☐ What were my IGF-1 and thyroid results, and when are they rechecked?
- ☐ Does the units figure match the dose for this vial? Ask again after every refill.
- ☐ Cancer history, pituitary condition, diabetes, steroid medicines, or pregnancy?
- ☐ Am I subject to anti-doping rules?
- ☐ What is measured, by when, and what is the plan if nothing changes?

SOURCES

1. U.S. Food and Drug Administration. Determination that GERE (sermorelin acetate) injection was not withdrawn from sale for reasons of safety or effectiveness. Federal Register, March 4, 2013.
2. Geref (sermorelin acetate for injection) prescribing information, historical. EMD Serono, 1997 (NDA 020443).
3. Corpas E, et al. Growth hormone (GH)-releasing hormone-(1-29) twice daily reverses the decreased GH and IGF-I levels in old men. J Clin Endocrinol Metab. 1992;75(2):530-535.
4. Vittone J, et al. Effects of single nightly injections of growth hormone-releasing hormone (GHRH 1-29) in healthy elderly men. Metabolism. 1997;46(1):89-96.
5. Khorram O, Laughlin GA, Yen SSC. Endocrine and metabolic effects of long-term administration of [Nle27]GHRH-(1-29)-NH2 in age-advanced men and women. J Clin Endocrinol Metab. 1997;82(5):1472-1479.
6. U.S. Food and Drug Administration. Bulk drug substances nominated for use in compounding under section 503A (Category 2 placements, September 2023; update April 2026).
7. U.S. Food and Drug Administration. Meeting of the Pharmacy Compounding Advisory Committee, October 29, 2024 (ipamorelin, ibutamoren, kisspeptin-10, L-theanine).
8. U.S. Food and Drug Administration. List of bulk drug substances for which there is a clinical need under section 503B. Federal Register, May 1, 2026; comment period extended June 26, 2026.
9. Sigalos JT, Pastuszak AW. The safety and efficacy of growth hormone secretagogues. Sex Med Rev. 2018;6(1):45-53.
10. World Anti-Doping Agency. The Prohibited List 2026: S2, growth hormone-releasing factors, including sermorelin.
11. Liu H, et al. Systematic review: the safety and efficacy of growth hormone in the healthy elderly. Ann Intern Med. 2007;146(2):104-115.

This guide is an educational summary of published sources and is not medical advice. No FDA-approved sermorelin product exists; the drug is available only as a compounded preparation on a prescription, and research-chemical vials are unapproved drugs. The trials described here were small, short, and measured hormone levels and body composition, not health outcomes. Status statements are current as of the edition date.

Newport Peptide Society

[NEWPORTPEPTIDESOCIETY.COM/GUIDES/SERMORELIN](https://newportpeptidesociety.com/guides/sermorelin)

FIRST EDITION · SEPTEMBER 2026 · REVISED
SEPTEMBER 23, 2026

Sermorelin

A guide to the clinic classic: a drug approved for children and then withdrawn, a molecule pharmacies may still compound, and thirty-year-old trials that measured hormones rather than outcomes

Sermorelin is the first 29 amino acids of growth hormone-releasing hormone, the shortest fragment that still does the whole job. It was an approved drug from 1990 to 2008, first as a diagnostic test and then as a treatment for children who were not growing, and it left the market because growth hormone itself worked better. What kept it alive is a quirk of compounding law: because it was withdrawn for commercial reasons rather than safety, pharmacies may still make it, which makes sermorelin the one growth hormone releaser an anti-aging clinic can prescribe without breaking a rule. This guide covers what it is, what the adult trials actually measured, how it is dosed as sold, and why the legal position is better than the evidence.

How it works, and the human evidence

WHAT BLUNTS IT	WHY
Age	Pituitary response declines
Steroid medicines	Suppress the response; on the label
Low thyroid	Blunts release; the label required thyroid tests
Abdominal obesity	Suppresses growth hormone, the state most buyers want to treat
One injection, one pulse, capped by what the gland can make. Not dangerous; unpredictable without measuring.	

3^{3,4,5}
Randomized adult trials, all from the 1990s, about 40 people, none past 16 weeks. Hormones rose; men in one trial gained 1.3 kg lean mass

O
Trials of strength, function, sleep, or recovery, and no adult trial since 1997

WHAT WOULD COUNT
A placebo-controlled trial of six months or more measuring body composition by scan, function, sleep, IGF-1, and glucose. None exists, and no one can patent the molecule to pay for one.

How it is used, and where the FDA stands

CLINIC PROTOCOL FOR A 5 MG VIAL + 2 ML WATER (2,500 MCG/ML). NONE VALIDATED. BEDTIME, 5 NIGHTS ON, 2 OFF.			
WEEKS	NIGHTLY DOSE	UNITS	PER 4 WK
1–4	200 mcg	8	4 mg
5–12	300 mcg	12	6 mg
Higher	500 mcg	20	10 mg
After 12	Measure IGF-1; stop if no change		
Pharmacies dispense 9 or 15 mg vials too; recompute for the label. The old label dosed children at 30 mcg/kg.			
COMPOUNDED, PRESCRIBED	Lawful: a component of a drug withdrawn for non-safety reasons (FDA, 2013)		
OUTSOURCING FACILITY	Nominated for the 503B list; undecided as of the edition		
RESEARCH VIAL	Unapproved drug; also the molecule most often sold as tesamorelin		

LEGAL IS NOT THE SAME AS TESTED
The vial, the prescription, and the pharmacist are all real. None of that is evidence it does anything for an adult. "FDA-approved" in the brochure means a children's drug that left the market in 2008.

Dose arithmetic, and safety

UNITS = (MCG ÷ MCG/ML) × 100
A 5 mg vial with 2 mL is 2,500 mcg/mL: 300 mcg is 0.12 mL, or 12 units. A 9 mg pharmacy vial with 3 mL is 3,000 mcg/mL, and the same dose is 10 units. Recheck after every refill.

5 MG VIAL, ILLUSTRATION ONLY			
WATER	200 MCG	300 MCG	500 MCG
1 mL	4 units	6 units	10 units
2 mL	8 units	12 units	20 units
3 mL	12 units	18 units	30 units

- Common: injection-site reactions in about 1 in 6; headache, flushing, dizziness, hives in under 1%.
- Most children developed antibodies to it; the meaning over years of adult use is unstudied. Hypothyroidism in 6.5%: check thyroid.
- IGF-1 rises by design. Wrong candidate: cancer history, pituitary lesion, pregnancy, steroid medicines.
- No manufacturer, no surveillance, no adult data past four months since 2008.
- Athletes: banned at all times; detection is routine.

WHAT DOES HAVE EVIDENCE
Resistance training and protein for body composition; sleep timing and light for sleep; growth hormone itself, from an endocrinologist, for a diagnosed deficiency.