2.0

MODULE 5 OF 5 · UU LIFE PEPTIDES 2.0

PROTOCOL ROOM

The 14 ready-to-apply protocols. Fourteen complete protocols with week-by-week schedules, titration steps, monitoring, stop rules and exit plans, each built from the cards in modules two to four.

Module 5 | UU LIFE PEPTIDES 2.0 | Verified references | Reported doses with provenance

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Educational and informational reference for adults. Not medical advice, not a prescription, dose or treatment plan. Use of any substance. Many compounds described are not approved for human use and several are prohibited in sport. Decisions about any compound belong to you and a licensed clinician.

The 14 protocols

01	**Tendon & Ligament Repair** Recovery · Beginner · 8 weeks	BPC-157, TB-500
02	**Post-Injury Recovery Accelerator** Recovery · Intermediate · 6 weeks	BPC-157, TB-500, CJC-1295, Ipamorelin
03	**Gut Repair** Gut · Beginner · 8 weeks	BPC-157, KPV
04	**Clean Bulk (GH Axis)** Hypertrophy · Beginner · 12 weeks	CJC-1295, Ipamorelin
05	**Advanced Hypertrophy** Hypertrophy · Advanced · 10 weeks	CJC-1295, Ipamorelin, IGF-1 LR3
06	**Fat Loss with Muscle Preservation (Incretin Class)** Fat loss · Intermediate · 16 weeks	Semaglutide, Tirzepatide
07	**Non-Incretin Recomposition** Fat loss · Intermediate · 12 weeks	AOD-9604, HGH Fragment 176-191
08	**Metabolic and Mitochondrial Reset** Longevity · Intermediate · 8 weeks	MOTS-c, SS-31
09	**Deep Sleep and Nightly Recovery** Sleep · Beginner · 6 weeks	DSIP, Epitalon
10	**Cognitive Focus** Nootropics · Beginner · 4 weeks	Semax, Selank
11	**Neuro-Regeneration** Nootropics · Advanced · 8 weeks	Cerebrolysin, Semax
12	**Longevity Maintenance** Longevity · Intermediate · 10 weeks	Epitalon, Thymalin
13	**Libido and Sexual Response** Libido · Beginner · 4 weeks	PT-141, Kisspeptin-10
14	**Skin, Hair and Connective Tissue** Skin · Beginner · 12 weeks	GHK-Cu, Argireline

Every protocol follows the hierarchy from Module 1: inflammation and immunity, then energy, nervous system and sleep, then metabolism, then tissue and anabolic stimulus. Pre-checks, monitoring, stop rules and an exit plan are part of the protocol, not an appendix.

PROTOCOL 01 · RECOVERY

Tendon & Ligament Repair: Evidence and Rehabilitation Review

BEGINNER · 8 WEEKS · CORE: BPC-157, TB-500 · SUPPORT: GHK-CU

An eight-week framework for understanding experimental repair peptides, tracking rehabilitation and recognizing when reassessment is needed. BPC-157, TB-500 and GHK-Cu have no established human regimen for tendon or ligament repair in the cited evidence. The reported exposures describe research, not reader recommendations. Eight weeks is a review period, not a promised healing deadline.

WHO IT IS FOR

Adults who train and have a clinically assessed tendon or ligament injury, an appropriate rehabilitation plan and an interest in evaluating peptide claims. Beginner describes the educational level, not suitability for experimental exposure. This framework supports discussions with a sports medicine clinician or physiotherapist.

WHO SHOULD NOT RUN IT

People with an undiagnosed acute injury, suspected rupture, infection, unstable joint or postoperative restrictions requiring a surgeon's plan. Pregnancy, breastfeeding, active cancer, major organ disease and copper-handling disorders fall outside any established suitability assessment for these experimental exposures. Specialist review cannot establish their safety. Under the current WADA Prohibited List, BPC-157 is prohibited at all times under S0. Thymosin beta-4 and its derivatives, including TB-500, are prohibited at all times under S2. Source: [WADA Prohibited List] (https://www.wada-ama.org/en/prohibited-list).

THE LOGIC

This framework organizes clinical questions and evidence review. It is not a validated sequence of peptide administration. Initial assessment distinguishes expected injury responses from infection, inflammatory disease or excessive irritability. Suppressing inflammation does not automatically improve healing. Energy availability, sleep, psychological demands and relevant metabolic problems are assessed alongside the injury. They are not postponed into separate treatment stages. Rehabilitation loading remains injury-specific and follows clinical restrictions.

BPC-157 appears first because its preclinical literature includes tendon and tendon-to-bone injury models. Its repair evidence is grade C: animal findings and human evidence too weak to establish structural healing. The retrospective knee-pain report, PMID 34324435, cannot demonstrate tendon regeneration, ligament stability or faster return to sport. The systematic review, PMID 40756949, found predominantly preclinical evidence; its search ended in June 2024.

TB-500 follows as a separate evidence question. A short human trial examined recombinant thymosin beta-4, not a validated TB-500 tendon-repair treatment. It does not establish the identity, dose or efficacy of preparations described as TB-500. TB-500-specific human tendon repair remains grade D, reflecting indirect mechanistic reasoning and unsupported extrapolation. The cited evidence does not establish benefit from adding it to BPC-157.

GHK-Cu is an optional evidence topic because a rat ACL reconstruction study reported temporary improvements in selected mechanical outcomes. This is grade C evidence for that animal model. The order reflects relevance and uncertainty, not demonstrated synergy or a reason to escalate treatment.

COMPONENTS · DOSES AS REPORTED IN THE SOURCES NAMED

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
BPC-157	Primary evidence review for experimental tendon repair. Grade C for repair; limited human pain observations do not establish tissue restoration.	PMID 18594781 reported BPC-157 10 mcg/kg by intraperitoneal administration once daily in rats after Achilles tendon-to-bone transection. This animal exposure does not establish a human dose or support conversion into a personal regimen. The animal exposure and early functional endpoints were verified in the abstract of PMID 18594781. PMID 34324435 describes uncontrolled human knee-pain observations without a structural-healing endpoint. PMID 40756949 documents the predominantly preclinical orthopedic evidence base.	Intraperitoneal in PMID 18594781. This does not establish equivalence with oral, subcutaneous or intra-articular human administration. · Once daily in PMID 18594781; no validated frequency for human tendon or ligament repair.	In PMID 18594781, treatment began 30 minutes after surgery. This establishes no timing advantage relative to human training, meals or sleep.	PMID 18594781 assessed early recovery on postoperative days 1 through 4. It does not support eight active treatment weeks.	No validated human titration steps for this indication. Neither low-dose initiation nor escalation for persistent pain has demonstrated benefit in the cited evidence.
TB-500	Secondary evidence review. Grade D for TB-500-specific human tendon repair; recombinant thymosin beta-4 findings provide indirect context only.	No validated TB-500 dose for human tendon repair is established by the cited studies. PMID 34346165 reported recombinant human thymosin beta-4 at 0.5, 2.0 or 5.0 mcg/kg intravenously once daily for 10 days. These were separate healthy-volunteer cohorts. These different-agent study exposures are not TB-500 doses. PMID 34346165 supports grade B evidence for short-term tolerability and pharmacokinetics of the studied recombinant thymosin beta-4 preparation. It does not establish long-term safety, TB-500 interchangeability or tendon healing. Source: [Wang et al., phase I study] (https://pubmed.ncbi.nlm.nih.gov/34346165/).	Intravenous for recombinant thymosin beta-4 in PMID 34346165. No route conversion to TB-500 is established. · Once daily for the related molecule in PMID 34346165. No validated TB-500 repair frequency.	No demonstrated relationship to training, food or sleep. Healthy-volunteer pharmacokinetics do not establish an effective rehabilitation schedule.	PMID 34346165 used a 10-day repeated-dose period. It provides no evidence-based TB-500 treatment duration for this framework.	Separate research cohorts are not personal titration steps. No validated loading, maintenance or escalation sequence exists for this repair claim.
GHK-Cu	Optional review of experimental matrix remodeling. Grade C for rat ACL graft healing; human tendon and ligament benefit remains unestablished.	PMID 25731775 reported GHK-Cu solutions at 0.3 or 3 mg/mL by intra-articular administration once weekly for four weeks in rats after ACL reconstruction. These are solution concentrations, not administered mass or human doses. The retrieved abstract does not specify administration volume. PMID 25731775 reported early laxity and stiffness findings that were absent at the later assessment. Ultimate load did not significantly improve. Source: [Fu et al., rat ACL reconstruction study] (https://pubmed.ncbi.nlm.nih.gov/25731775/).	Intra-articular in PMID 25731775. Topical exposure does not establish delivery to an injured tendon or ligament. · Once weekly for four administrations in PMID 25731775; no validated human repair frequency.	PMID 25731775 began treatment during postoperative week 2. No human training, food or bedtime advantage is established.	Postoperative weeks 2 through 5 in PMID 25731775. These research weeks do not establish a human treatment window.	Two fixed concentration groups were compared. They provide no human titration steps or rationale for escalation.

WEEK BY WEEK

WEEK	ACTIONS	WATCH
1	Confirm diagnosis, restrictions and a clinician-selected functional test. Record baseline symptoms and establish tolerable rehabilitation. Review BPC-157 evidence and distinguish animal exposures from human treatment.	Rest pain, swelling, instability and loss of function. Acute rupture or infection signs require assessment before progression.
2	Review nutrition, energy availability and sleep consistency. Repeat the same functional test under comparable conditions. Keep rehabilitation within the agreed symptom response.	Next-morning stiffness, swelling or reduced function after exercise. Persistent worsening indicates that load or diagnosis needs review.

WEEK	ACTIONS	WATCH
3	Progress one rehabilitation variable only when permitted by the treating clinician and current response. Review the distinction between TB-500 and recombinant thymosin beta-4.	Pain relief without corresponding strength or function improvement. Reduced pain alone does not establish stronger tissue.
4	Complete a midpoint review of pain, function, adherence and activity exposure. Reassess the diagnosis if progress is absent. Consider relevant metabolic testing when history supports it.	Increasing night pain, recurrent joint giving-way or inability to tolerate previously manageable activity.
5	Review the limited GHK-Cu evidence. Continue the rehabilitation plan and document every treatment change so that symptom trends remain interpretable.	Attributing ordinary recovery to an added compound. Animal improvements in stiffness do not establish human return-to-sport readiness.
6	Repeat objective testing with the clinician or physiotherapist. Introduce greater task demands only when appropriate for the specific injury and recovery stage.	Compensatory movement, reduced control, delayed swelling or a decline in the standardized functional test.
7	Assess whether gains persist across repeated sessions and ordinary daily activity. Prepare the week-eight review and identify unresolved restrictions.	Dependence on increasing analgesia to complete activity, repeated flares or inability to sustain the current workload.
8	Compare outcomes with baseline and set the next rehabilitation phase. Any experimental exposure requires clinician-directed review rather than automatic extension.	Persistent weakness, laxity, swelling or plateau. These findings justify reassessment rather than an assumed need for more peptides.

PRE-CHECKS

- Document injury location, onset, mechanism, diagnosis, prior surgery and current restrictions. Examination determines whether imaging would change management.
- Record pain at rest and during one standardized task, morning stiffness duration, swelling, range of motion and a clinically appropriate functional or strength measure.
- Record available baseline blood pressure, resting heart rate, body weight and usual activity level. These measurements provide context but cannot establish experimental peptide suitability.
- Record sleep duration, sleep quality, recent weight loss, dietary restriction, smoking, alcohol and rehabilitation capacity.
- Review diabetes, inflammatory disease, cancer, kidney or liver disease, allergies, pregnancy potential and copper-handling disorders. Review medicines, including corticosteroids, fluoroquinolones and anticoagulants.
- Fasting glucose or HbA1c may be relevant with diabetes risk, known dysglycemia or unexplained delayed healing. CBC, renal function and liver tests depend on clinical history and planned care. Routine hormone, inflammatory-marker or copper panels are not universal prerequisites. Normal results do not establish peptide safety, and validated contraindication or interaction profiles are unavailable for these experimental repair uses.

MONITORING

- Weekly: compare standardized task pain, next-morning stiffness, swelling, range of motion and the selected functional measure with baseline.
- Record rehabilitation sessions, exercise load, repetitions, activity exposure and next-day response. Interpret improvement alongside changes in workload.
- Track sleep and weight trend when relevant to recovery. Blood pressure and resting heart rate monitoring follow clinical needs. Waist measurement is optional general context, not a tendon-healing endpoint.
- Record all treatment changes and adverse symptoms. Laboratory follow-up addresses clinical indications, abnormal baseline findings or symptoms. No validated laboratory panel can rule out harms from these experimental exposures.

STOP RULES

- Stop loading the affected structure and obtain urgent assessment after a sudden pop with new weakness, deformity, inability to bear weight or abrupt loss of function.
- Seek same-day assessment for a hot, red, rapidly swelling joint, fever or spreading redness, particularly after any invasive procedure.
- Stop suspected experimental exposure and seek emergency care for breathing difficulty, facial or tongue swelling, fainting or chest pain.
- New unilateral calf swelling requires urgent assessment. Sudden breathlessness, progressive weakness or a cold, pale limb requires emergency assessment.
- Pause progression and contact the treating clinician for recurrent instability, worsening night pain or persistent next-day deterioration. New systemic symptoms, including jaundice, require prompt medical assessment.

EXPECTED TIMELINE

Symptoms may change over the first few weeks with appropriate load management. Structural recovery depends on the injury and cannot be inferred from pain alone. Week 4 is an organizational reassessment point; week 8 is an outcome review. Neither is a validated peptide-treatment milestone. Major tears and reconstructed ligaments may require substantially longer rehabilitation. None of the cited studies establishes a human peptide-assisted healing deadline.

EXIT PLAN

At week 8, reassess the diagnosis, function, strength, swelling and tolerance of meaningful activity. Continue rehabilitation according to tissue capacity and clinical restrictions. There is no validated washout duration, taper or repeat-cycle interval for this proposed combination. If experimental exposure occurred, document the last exposure and arrange clinician review of discontinuation and follow-up. Reassess symptoms and function after discontinuation; this observation period cannot confirm drug clearance or establish treatment causality. Persistent deficits may warrant repeat examination or imaging when it would change care.

COMMON MISTAKES

- Treating an educational eight-week framework as a validated eight-week drug cycle.
- Converting animal doses or solution concentrations into personal human doses.
- Assuming recombinant thymosin beta-4 and preparations described as TB-500 are clinically interchangeable.
- Using less pain as permission to resume unrestricted loading.
- Adding multiple compounds while changing training, making outcomes difficult to interpret.
- Extending experimental exposure instead of reassessing a stalled recovery.

TRACKER FIELDS

Injury site and diagnosis · Current clinical restrictions · Rest pain 0 to 10 · Standardized task name · Task pain 0 to 10 · Next morning stiffness minutes · Swelling measure and method · Range of motion degrees · Functional test name result and units · Rehabilitation sessions completed · Exercise load sets and repetitions · Activity exposure minutes · Next day symptom response · Average sleep hours · Sleep quality 0 to 10 · Body weight kg · Waist cm if measured · Resting heart rate bpm if indicated · Blood pressure mmHg if indicated · Medication and treatment changes · Experimental exposure if any compound dose route frequency dates and provenance · Adverse symptoms and onset · Laboratory results if indicated · Clinician review and next step

REFERENCES

1. Krivic A et al. Modulation of early functional recovery of Achilles tendon to bone unit after transection by BPC 157 and methylprednisolone.. *Inflammation research : official journal of the European Histamine Research Society ... [et al.]*, 2008. `PMID 18594781` `DOI 10.1007/s00011-007-7056-8` (Grade C. Rat tendon-to-bone injury experiment supporting the reported BPC-157 exposure and early functional findings. It does not establish human dosing, mature collagen healing or durable repair.)
2. Lee E et al. Intra-Articular Injection of BPC 157 for Multiple Types of Knee Pain.. *Alternative therapies in health and medicine*, 2021. `PMID 34324435` (Grade C for tendon and ligament repair. Small uncontrolled retrospective human knee-pain report. It lacks demonstrated structural healing, standardized functional assessment and reliable evidence of combination superiority.)

3. Wang X et al. A first-in-human, randomized, double-blind, single- and multiple-dose, phase I study of recombinant human thymosin β4 in healthy Chinese volunteers.. *Journal of cellular and molecular medicine*, 2021. PMID 34346165 DOI 10.1111/jcmm.16693 (Grade B for short-term human tolerability and pharmacokinetics of the specific recombinant thymosin beta-4 preparation. This small phase I trial does not validate TB-500 dosing, long-term safety or tendon repair.)

4. Fu SC et al. Tripeptide-copper complex GHK-Cu (II) transiently improved healing outcome in a rat model of ACL reconstruction.. *Journal of orthopaedic research : official publication of the Orthopaedic Research Society*, 2015. PMID 25731775 DOI 10.1002/jor.22831 (Grade C. Supports the reported rat solution concentrations and schedule. Selected early mechanical benefits were absent at the later assessment; ultimate load did not significantly improve.)

5. Vasireddi N et al. Emerging Use of BPC-157 in Orthopaedic Sports Medicine: A Systematic Review.. *HSS journal : the musculoskeletal journal of Hospital for Special Surgery*, 2025. PMID 40756949 DOI 10.1177/15563316251355551 (Supports grade C for the BPC-157 repair claim: predominantly preclinical findings and weak human orthopedic evidence. Its search ended in June 2024. It does not establish a validated human repair regimen or a complete account of subsequently published evidence.)

PROTOCOL 02 · RECOVERY

Post-Injury Recovery Evidence and Rehabilitation Review

INTERMEDIATE · 6 WEEKS · CORE: BPC-157, TB-500, CJC-1295, IPAMORELIN

A six-week framework for evaluating recovery, understanding four experimental compounds, and tracking rehabilitation. No controlled human study in the verified evidence establishes that this combination accelerates musculoskeletal healing. Reported exposures describe research or non-clinical conventions, not recommended doses. Six weeks defines the assessment period, not a validated drug course or return-to-sport deadline.

WHO IT IS FOR

Adults who train, have a diagnosed musculoskeletal injury and an established rehabilitation plan, and want to assess peptide claims with a clinician. Intermediate refers to the interpretation required. Animal healing findings, human hormone responses, symptom relief, and restored tissue capacity are different outcomes.

WHO SHOULD NOT RUN IT

Unsuitable as a self-directed drug cycle, treatment for an undiagnosed injury, or substitute for surgery or rehabilitation. Pregnancy and breastfeeding lack adequate safety evidence. Active cancer, pituitary disease, uncontrolled diabetes, and unexplained swelling make experimental exposure especially inappropriate without specialist assessment. These concerns are not a complete, validated contraindication list. All four compounds are prohibited at all times: BPC-157 under S0, CJC-1295 and ipamorelin under S2.2.4, and TB-500 under S2.3. Source: [2026 WADA Prohibited List](https://www.wada-ama.org/sites/default/files/2025-09/2026list_en_final_clean_september_2025.pdf).

THE LOGIC

The following order organizes the evidence review. It is not a validated biological hierarchy or sequence for administering peptides. Clinical assessment first identifies infection, inflammatory disease, postoperative complications, and excessive mechanical loading. Normal inflammation participates in repair; suppressing every inflammatory signal is not a recovery goal. BPC-157 enters this discussion because animal studies report effects on inflammatory signaling, vascular responses, and tendon repair. These findings do not establish human immune protection or faster healing.

Energy availability, pain management, sleep, and rehabilitation are assessed together. Underfeeding during injury, particularly during an aggressive fat-loss phase, can complicate rehabilitation. Neurological symptoms require appropriate examination. None of the four compounds has persuasive human evidence in the verified sources for correcting these recovery limitations after musculoskeletal injury.

Metabolic and endocrine history matter when interpreting growth hormone stimulation. CJC-1295 and ipamorelin affect the growth hormone axis. Glucose control, edema, and relevant endocrine disease therefore warrant attention. CJC-1295 appears first in the endocrine evidence review because its human trials documented sustained GH and IGF-1 responses. Those surrogate outcomes do not demonstrate tissue repair. Adding another secretagogue has no established injury-healing advantage.

Appropriate tissue loading follows the injury-specific rehabilitation plan throughout recovery, rather than waiting until other steps are complete. TB-500 belongs in the tissue-repair discussion, but evidence concerning full-length thymosin beta-4 cannot automatically be assigned to its fragment. Component order does not imply administration order. The verified studies do not validate sequential administration, simultaneous stacking, or six-week exposure to these four compounds. The schedule therefore specifies rehabilitation actions and assessment points without assigning active drug weeks. The broader evidence limitations are also discussed in PMID 41966639.

COMPONENTS · DOSES AS REPORTED IN THE SOURCES NAMED

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
BPC-157	Experimental tissue-repair candidate. Grade C for musculoskeletal recovery: animal findings and weak retrospective human pain evidence do not establish structural healing or a reliable human safety profile.	PMID 16583442 reported BPC-157 10 mcg/kg intraperitoneally once daily in rats after Achilles tendon detachment. This animal exposure is not an established human dose. Primary animal study, PMID 16583442. Systematic review PMID 40756949 included 35 preclinical studies and one retrospective clinical study, with searches through June 3, 2024.	Intraperitoneal in PMID 16583442. This experiment does not validate human subcutaneous, oral, or intra-articular administration. · Once daily in the rat experiment, PMID 16583442.	In PMID 16583442, treatment began 30 minutes after surgery. No validated human timing relative to training, meals, or sleep is established.	Animal outcomes were assessed through day 21 in PMID 16583442. Human active weeks within this six-week framework are not established.	No validated human starting dose, escalation interval, loading phase, or taper exists for musculoskeletal recovery. Animal dose groups do not constitute individual titration.
TB-500	Proposed tissue-remodeling candidate. Grade D for the TB-500 fragment's claimed human injury benefit. Actin-binding biology provides a rationale, not demonstrated clinical efficacy.	TB-500 2 mg subcutaneously twice weekly is commonly cited in non-clinical use; not validated in trials. This convention has no established efficacy or safety for human injury recovery. The dose is explicitly non-clinical. PMID 22962027 identified an acetylated thymosin beta-4 fragment in material labeled TB-500. It supports molecular identity, not dosing or healing efficacy. Full-length thymosin beta-4 is a different molecule; the name alone does not establish the contents of another preparation.	Subcutaneous describes the non-clinical convention only. The cited analytical paper does not establish a therapeutic route. · Twice weekly is commonly cited in non-clinical use; not validated in trials.	No validated relationship to rehabilitation sessions, food, or bedtime exists.	No evidence-based six-week course or active-week allocation exists.	No validated loading, maintenance, escalation, or tapering method exists. Lack of improvement does not establish a reason to increase exposure.
CJC-1295	Long-acting GHRH analog with human evidence of GH and IGF-1 elevation. Grade B for short-term endocrine findings; grade D for extrapolation to faster injury recovery.	PMID 16352683 studied CJC-1295 30 mcg/kg subcutaneously as a single administration within ascending-dose research. This is a reported healthy-volunteer exposure, not an injury-treatment recommendation. PMID 16352683 reports two short randomized placebo-controlled trials in healthy adults. Outcomes concerned pharmacokinetics and endocrine responses, not tendon strength, return to sport, or fracture union.	Subcutaneous in PMID 16352683. The study concerns long-acting CJC-1295 with albumin-binding activity, commonly described as the DAC form. · The stated exposure is a single dose in PMID 16352683. Separate study arms investigated repeated weekly or every-other-week administration.	No injury-recovery benefit from pretraining, fasting, or bedtime administration was established. Long persistence does not support a narrow daily dosing window.	Trials in PMID 16352683 lasted 28 and 49 days. Those study durations do not establish six weeks of treatment for an injury.	Research dose escalation does not establish individual titration. No injury-specific target or escalation rule exists. Preparations described as CJC-1295 without DAC cannot inherit this study's pharmacokinetics.

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
Ipamorelin	Ghrelin-receptor agonist and GH secretagogue. Grade B for limited short-term human clinical evidence, not demonstrated benefit. Grade D for musculoskeletal recovery claims. The cited postoperative trial assessed bowel function.	PMID 25331030 administered ipamorelin 0.03 mg/kg by intravenous infusion twice daily from postoperative day 1 through day 7 or hospital discharge. PMID 25331030, a phase 2 randomized trial, found no statistically significant differences in key or secondary efficacy analyses. This does not prove equivalence. It did not test tissue healing or a CJC-1295 combination.	Intravenous infusion in hospitalized surgical patients in PMID 25331030. This does not validate outpatient subcutaneous administration. · Twice daily in PMID 25331030.	Treatment followed bowel surgery in PMID 25331030. No validated timing relative to exercise, meals, or sleep exists for musculoskeletal recovery.	The exposure in PMID 25331030 lasted up to one week. It cannot substantiate a six-week course.	The cited regimen was fixed by the study protocol. No validated injury-specific escalation, bedtime schedule, or titration alongside CJC-1295 exists.

WEEK BY WEEK

WEEK	ACTIONS	WATCH
1	Confirm diagnosis, healing stage, restrictions, and rehabilitation goals. Record baseline function using one reproducible task approved by the treating clinician. Review compound evidence and uncertainties.	Worsening swelling, wound changes, fever, neurological symptoms, and inability to perform previously tolerated daily activities.
2	Review food intake, weight trend, sleep opportunity, and rehabilitation adherence. Repeat the functional assessment under similar conditions. Address persistent pain or sleep disruption with the treating team.	Unintended weight loss, fatigue, disturbed sleep, and symptoms that remain elevated the morning after rehabilitation.
3	Reassess motion and task tolerance. Progress rehabilitation according to the injury-specific plan. If GH-axis exposure has occurred, clinical review includes glucose concerns and adverse symptoms.	Edema, tingling, headaches, rising glucose, and apparent weight gain that may reflect fluid retention.
4	Compare current function with baseline and planned milestones. Persistent stagnation prompts diagnostic and rehabilitation review. Review IGF-1 when clinically indicated after GH-axis exposure.	Pain relief without improved load tolerance, new night pain, and function that deteriorates despite reduced activity.
5	Practice clinician-approved movements relevant to work or sport. Document the response during activity and the following morning. Maintain restrictions where structural healing remains incomplete.	Compensatory movement, recurrent swelling, instability, and an increasing need for analgesics to complete sessions.
6	Repeat baseline assessments and review the next rehabilitation phase. Document any exposure end dates and unresolved adverse effects with the clinician. Set follow-up according to findings.	Persistent functional deficits, abnormal glucose or IGF-1 where measured, and pressure to resume unrestricted training before clearance.

PRE-CHECKS

- Record diagnosis, injury date, affected structure, surgery details, imaging findings when available, and explicit loading restrictions.
- Collect seated blood pressure and resting heart rate on several mornings, body weight, waist circumference, sleep duration, and sleep quality.
- Record resting and activity pain on a 0 to 10 scale, swelling, range of motion, analgesic use, and one repeatable functional task.
- Review medications, supplements, allergies, previous peptide exposure, pregnancy or breastfeeding, diabetes, cancer history, pituitary disease, sleep apnea, and cardiovascular, kidney or liver disease.
- Discuss fasting glucose or HbA1c when metabolic risk or GH-axis exposure makes assessment relevant. Baseline age-adjusted IGF-1 may inform endocrine evaluation.
- CBC, kidney and liver tests, inflammatory markers, or further imaging should follow clinical indications. Normal laboratory results do not establish experimental-drug safety.

MONITORING

- Summarize weekly pain, swelling, motion, rehabilitation completion, and functional-task performance. Compare equivalent testing conditions.
- Track average morning weight, blood pressure, resting pulse, sleep duration, and adverse symptoms. Measure waist consistently.
- Record session load and next-morning response. Separate symptom improvement from increased tissue capacity.
- Following GH-axis exposure, the clinician sets glucose and IGF-1 reassessment timing. HbA1c is not a useful weekly response marker.
- Record the actual compound identity, formulation, route, exposure dates, and other medication changes when known. Missing information limits interpretation of effects.

STOP RULES

- Stop activity and seek emergency care for chest pain, sudden breathlessness, fainting, or one-sided calf swelling with breathing symptoms.
- Seek urgent same-day assessment for new one-sided calf swelling, even without breathing symptoms.
- Seek urgent assessment for fever with a hot swollen joint, wound drainage, spreading redness, or rapidly increasing pain.
- Stop activity and obtain urgent evaluation for a new pop with loss of function, progressive weakness, numbness, or a cold or pale limb.
- Stop suspected experimental exposure and seek emergency care for facial or tongue swelling, breathing difficulty, or widespread hives with dizziness.
- Pause experimental exposure pending clinical review for persistent edema or sustained palpitations. Severe headache or new visual changes warrant urgent assessment.
- Repeated fasting glucose at or above 126 mg/dL warrants prompt clinical review and appropriate laboratory confirmation. A home meter alone does not establish diabetes.
- Glucose at or above 200 mg/dL with thirst or frequent urination warrants same-day assessment. Vomiting, confusion, or deep rapid breathing warrants emergency care.

EXPECTED TIMELINE

Pain and daily function may improve during the first weeks of appropriate rehabilitation, but the trajectory depends on diagnosis and severity. Tendon remodeling, fracture healing, and postoperative recovery often extend beyond six weeks. Hormone elevation, transient energy changes, or reduced pain cannot demonstrate stronger repaired tissue. The verified evidence does not support a percentage reduction in recovery time from this four-compound combination. Improvement during exposure cannot establish causation when rehabilitation and natural recovery occur simultaneously.

EXIT PLAN

Week six ends this assessment block, not necessarily rehabilitation. No evidence-based taper or universal follow-up interval exists for the combination. CJC-1295 had an estimated half-life of 5.8 to 8.1 days in PMID 16352683. Repeated administration produced prolonged IGF-1 elevation, so endocrine effects can persist after the last exposure. A clinician determines follow-up from actual exposure, symptoms, and laboratory findings. A calendar interval cannot establish biological recovery. Reassessment covers function, swelling, sleep, glucose and IGF-1 where indicated, and remaining rehabilitation milestones. Incomplete recovery does not establish a rationale for automatically repeating experimental exposure.

COMMON MISTAKES

- Treating animal doses as human equivalents or changing routes while retaining the same number.
- Equating TB-500 with full-length thymosin beta-4 or long-acting CJC-1295 with preparations described as without DAC.
- Interpreting increased IGF-1, reduced pain, or fluid-related weight gain as proof of tissue healing.
- Changing several exposures and rehabilitation variables simultaneously, making benefits and adverse effects difficult to attribute.

- Using six weeks as a return-to-sport deadline regardless of examination findings.
- Treating a short human trial, a normal laboratory panel, or a nonsignificant efficacy result as proof of long-term safety or effectiveness.

TRACKER FIELDS

Injury site and diagnosis · Days since injury or surgery · Current loading restrictions · Rest pain 0 to 10 · Activity pain 0 to 10 · Next morning pain 0 to 10 · Swelling measurement and method · Range of motion degrees · Functional test name and result · Rehabilitation sessions completed · Exercise load sets and repetitions · Mean morning body weight kg · Waist cm · Mean seated bp mmHg · Mean resting hr bpm · Mean sleep hours · Sleep quality 0 to 10 · Analgesics and other medication changes · Actual exposures dose route frequency and dates if any · Compound identity and formulation if known · Adverse symptoms and onset · Glucose result units and date if measured · Igf1 result age adjusted range and date if measured · Clinician decision and next review

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1. Krivic A et al. Achilles detachment in rat and stable gastric pentadecapeptide BPC 157: Promoted tendon-to-bone healing and opposed corticosteroid aggravation.. *Journal of orthopaedic research : official publication of the Orthopaedic Research Society*, 2006. PMID 16583442 DOI 10.1002/jor.20096 (Rat tendon-to-bone healing findings and reported intraperitoneal exposure, timing, and assessment period. Grade C; does not establish human treatment.)
2. Vasireddi N et al. Emerging Use of BPC-157 in Orthopaedic Sports Medicine: A Systematic Review.. *HSS journal : the musculoskeletal journal of Hospital for Special Surgery*, 2025. PMID 40756949 DOI 10.1177/15563316251355551 (Review of 35 preclinical studies and one retrospective clinical study, with searches through June 2024. Supports grade C for musculoskeletal recovery and substantial clinical safety uncertainty.)
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4. Teichman SL et al. Prolonged stimulation of growth hormone (GH) and insulin-like growth factor I secretion by CJC-1295, a long-acting analog of GH-releasing hormone, in healthy adults.. *The Journal of clinical endocrinology and metabolism*, 2006. PMID 16352683 DOI 10.1210/jc.2005-1536 (Reported subcutaneous CJC-1295 exposure, sustained endocrine responses, and prolonged pharmacokinetics in two short randomized trials. Grade B for endocrine findings; no musculoskeletal healing outcomes.)
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6. Mendias CL et al. Safety and Efficacy of Approved and Unapproved Peptide Therapies for Musculoskeletal Injuries and Athletic Performance.. *Sports medicine (Auckland, N.Z.)*, 2026. PMID 41966639 DOI 10.1007/s40279-026-02437-0 (Narrative sports-medicine review covering all four compounds. Supports the distinction between preclinical findings and clinical benefit, and the scarcity of rigorous human safety evidence.)

PROTOCOL 03 · GUT

Gut Repair: Evidence and Symptom Review

BEGINNER · 8 WEEKS · CORE: BPC-157, KPV · SUPPORT: LL-37

An eight-week educational framework for evaluating experimental gut peptides, documenting symptoms and identifying concerns that warrant clinical evaluation. BPC-157 and KPV are core research topics; LL-37 is optional research context. The verified studies do not establish a human regimen that repairs the gut, validates this combination or delivers results within eight weeks. Reported exposures below describe animal experiments, not reader recommendations.

WHO IT IS FOR

Adults who train and want to evaluate gut-related peptide claims with a structured symptom record. Beginner describes the educational level, not established safety for self-administration. Appropriate goals include identifying reproducible symptom patterns, understanding evidence quality and preparing a useful discussion with a clinician.

WHO SHOULD NOT RUN IT

Anyone seeking self-treatment for suspected inflammatory bowel disease, gastrointestinal bleeding, infection or unexplained weight loss. Pregnancy, breastfeeding, immunosuppression, active cancer, major kidney or liver disease and recent gastrointestinal surgery require individualized medical assessment. These studies do not establish safety in those populations or provide a complete contraindication profile. This framework cannot replace prescribed treatment or postoperative follow-up.

THE LOGIC

Assessment begins with symptom severity, warning signs and plausible causes. Inflammation, infection, medication effects and noninflammatory disorders require different approaches. Bloating alone does not establish inflammation, increased intestinal permeability or a need for immune modulation. The schedule provides review checkpoints, not a validated sequence of biological priorities or peptide administration.

KPV fits an inflammatory-signaling hypothesis through cell and mouse findings. BPC-157 fits a mucosal injury and repair hypothesis through rat findings. Both receive grade C for proposed human gut-treatment benefits. Their mechanistic overlap does not establish additive benefit. None of the three verified studies supports starting one compound and adding another in a particular week.

LL-37 provides research context for innate immunity. Antimicrobial activity does not establish treatment of a diagnosed intestinal infection. Its administered gut-treatment evidence here is grade C, with grade D cell mechanisms. Human observational associations do not demonstrate that administering LL-37 improves disease. These evidence grades describe support for gut-treatment claims, not established safety.

Adequate energy intake, hydration, sleep, stress management and appropriate training adjustments belong throughout the review. Metabolic concerns and nutritional deficiencies merit assessment whenever clinically relevant. They need not wait until a scheduled week. No cited evidence validates a universal inflammation-first, metabolism-second, tissue-recovery-last treatment hierarchy. Additional metabolic or anabolic peptides would introduce further uncertainty. The eight weeks organize symptom documentation and follow-up, not an experimental drug cycle.

COMPONENTS · DOSES AS REPORTED IN THE SOURCES NAMED

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
BPC-157	Core research topic for mucosal injury and tissue repair. Grade C for proposed human gut efficacy; animal healing findings do not establish clinical remission.	PMID 24304574 reports BPC-157 at 10 mcg/kg or 0.01 mcg/kg, administered intraperitoneally once daily in rats. The lower value is a unit conversion from the study's reported nanogram dose. These experimental animal doses are not human dose equivalents. Primary rat study, PMID 24304574. Species, route and injury model limit translation. [Original study] (https://www.jpp.krakow.pl/journal/archive/10_13/pdf/597_10_13_article.pdf).	Intraperitoneal in the cited dose arms. Separate drinking-water arms do not validate human oral formulations or subcutaneous administration. · Once daily in the cited rat experiments, PMID 24304574. No human gut-treatment frequency is established by this study.	In PMID 24304574, postoperative administration began immediately after surgery, with the last dose 24 hours before sacrifice. Human meal or training timing was not studied.	No human exposure weeks assigned. The cited surgical model assessed outcomes through day 14, not an eight-week human course.	No validated human titration steps. Separate experimental dose arms were not an escalation sequence.
KPV	Core research topic for intestinal inflammatory signaling. Grade C for proposed gut-treatment benefits; supporting cultured-cell mechanisms are grade D.	PMID 18061177 reports KPV at 100 micromol/L in drinking water, administered orally with unrestricted access in mice during an eight-day DSS-colitis experiment. This concentration does not specify a fixed daily mass dose because water consumption determines exposure. Primary cell and mouse study, PMID 18061177. PepT1-mediated uptake and inflammatory signaling were studied in cultured cells. Molar units preserve the reported concentration without inventing a daily mass dose. [Original study] (https://pmc.ncbi.nlm.nih.gov/articles/PMC2431115/).	Oral drinking water in mice. This formulation does not establish equivalence to human oral formulations or injected KPV. · Ongoing drinking-water access in PMID 18061177, not a once-daily bolus.	KPV accompanied DSS exposure in this experiment. No human relationship to meals, exercise or bedtime was established.	No human exposure weeks assigned. Eight experimental days do not establish an eight-week human course.	No validated human starting dose, escalation interval or maintenance dose. The experimental concentration was not a titration protocol.
LL-37	Optional research topic for innate immunity. Grade C for proposed administered gut treatment. Human observational findings do not establish treatment efficacy.	PMID 31955203 reports LL-37 at 5 mg/kg, administered intrarectally once daily in mice for 14 days. Exposure covered seven days before and seven days during DSS administration. This is not a human regimen. PMID 31955203 included human observational data, cell experiments and mouse treatment. Reduced mouse colitis did not establish restoration of microbial composition. [Original study] (https://pmc.ncbi.nlm.nih.gov/articles/PMC7216768/).	Intrarectal in the mouse experiment. Systemic administration cannot be assumed equivalent. · Once daily in PMID 31955203. Human gut-treatment frequency remains unestablished by this study.	Administration began before chemically induced colitis and continued during induction. This design does not establish treatment of existing human disease.	No human exposure weeks assigned. Optional research context does not mean introducing LL-37 if symptoms persist.	No validated human titration. Persistent symptoms warrant diagnostic reassessment, not an assumed antimicrobial-peptide escalation.

WEEK BY WEEK

WEEK	ACTIONS	WATCH
1	Record seven baseline days when symptoms permit observation. Define the main symptom and its effect on eating, sleep and training. Review medicines, supplements and recent illness.	Blood, fever, nighttime diarrhea, dehydration or unintentional weight loss warrant assessment without waiting to complete the observation period.
2	Review the baseline with a clinician if symptoms persist or recur. Identify indicated testing and one manageable dietary or behavioral change.	Distinguish urgency, loose stools, constipation, reflux and pain. These patterns have different causes and should not share an assumed diagnosis.
3	Maintain adequate food intake and hydration. Keep prescribed treatment consistent. Document the chosen change and avoid introducing several new supplements.	Track whether improvement coincides with medication changes, reduced alcohol, altered fiber intake or lower training stress.
4	Compare weekly averages with baseline. Review available laboratory or stool results. Arrange reassessment if symptoms remain disruptive or worsen.	Less bloating does not prove mucosal healing. Persistent bleeding or abnormal inflammatory testing takes priority over subjective improvement.
5	Review energy intake, sleep regularity and stress alongside bowel symptoms. Reassess training demands against hydration, intake and recovery capacity.	Fatigue, dizziness, poor intake and elevated resting heart rate may reflect illness or inadequate recovery. Earlier assessment remains appropriate whenever these occur.
6	Follow up previously abnormal results and any relevant metabolic concerns. Consider gradual restoration of usual training when symptoms, intake and clinical advice permit.	Look for recurrence associated with training intensity, meal size or specific exposures. Avoid interpreting one good day as durable recovery.
7	Hold useful habits steady. Summarize symptom frequency, functional improvement and unresolved problems. Prepare questions for the endpoint review.	Check whether improvement persists without increasingly restrictive eating or growing reliance on symptom-relief medicines.
8	Complete the endpoint review against week one. Discuss further investigation, treatment adjustment or routine follow-up with the clinician when indicated.	Persistent symptoms, nutritional compromise or abnormal testing warrant continued clinical care. The endpoint does not establish eligibility for a peptide cycle.

PRE-CHECKS

- Document symptom onset, stool frequency and Bristol stool type, pain location, urgency, visible blood, nighttime symptoms, food tolerance and recent travel or antibiotics.
- Record resting heart rate, body weight, sleep duration and training load. Blood pressure may be relevant to dizziness or dehydration. Waist circumference is optional context, not a measure of intestinal healing.
- Review inflammatory bowel disease, celiac disease, ulcers, previous surgery, family gastrointestinal history and medicines affecting bowel function. Include NSAIDs, antibiotics and laxatives.
- For persistent symptoms, discuss whether a CBC and metabolic panel are indicated. Relevant measures may include electrolytes, kidney function, liver tests and albumin. Fatigue, bleeding or suspected deficiency may warrant ferritin or iron studies.
- Fecal calprotectin, CRP, stool pathogen testing and celiac serology depend on the clinical presentation. Celiac testing generally requires continued gluten exposure. Commercial permeability or microbiome panels do not establish eligibility for these peptides.
- Fasting glucose or HbA1c may be relevant with metabolic risk, diabetes symptoms or existing diabetes. Normal results do not establish experimental-peptide safety. These checks evaluate symptoms, not clearance for experimental exposure.
- BPC-157 is prohibited at all times under WADA S0. S0 also covers pharmacological substances without governmental approval for human therapeutic use when no subsequent List section addresses them. Absence of a substance's name does not establish permission. [WADA 2026 Prohibited List](https://www.wada-ama.org/sites/default/files/2025-09/2026list_en_final_clean_september_2025.pdf).

MONITORING

- Summarize daily stool counts, Bristol types, urgency episodes, nighttime bowel movements and any blood each week.
- Compare average and worst pain and bloating on consistent 0 to 10 scales. Record missed meals, interrupted sleep and missed training.
- Track weekly weight, resting heart rate, sleep and dietary changes under comparable conditions. Include blood pressure when clinically indicated.
- Record medication changes and adverse symptoms. Repeat laboratory or stool testing when clinically indicated, not automatically every week. Monitoring cannot establish safety for these experimental compounds.

STOP RULES

- Stop any experimental product and obtain urgent care for substantial rectal bleeding, black tarry stools, vomiting blood, fainting or severe abdominal pain. Marked distension with pain, vomiting or inability to pass stool or gas also requires urgent assessment.
- Seek urgent assessment for repeated vomiting, inability to retain fluids, very low urine output, or fever with worsening abdominal symptoms.
- Breathing difficulty, facial or tongue swelling, or widespread hives with dizziness require emergency care.
- Arrange prompt clinical review for persistent nighttime diarrhea, unexplained weight loss, new anemia, progressive symptoms or worsening inflammatory results. Do not independently stop essential prescribed medicines.

EXPECTED TIMELINE

The first two weeks organize symptom patterns and clinical questions. Weeks three through six review changes associated with diagnosis-specific care and stable habits. Weeks seven and eight assess durability and remaining impairment. These are organizational checkpoints, not expected response times. The verified studies provide no reliable human gut-repair timeline for BPC-157, KPV or LL-37. Symptom improvement alone does not confirm healed intestinal tissue.

EXIT PLAN

End the structured eight-week review by comparing symptoms, function, weight and clinically relevant tests. The cited evidence establishes no taper or washout interval for this combination. It also provides no validated method for calculating human clearance after combined exposure. If exposure occurred, document the compound, route, amount, frequency and last exposure date for the clinician. A further two to four weeks of observation can serve as a practical follow-up window when clinically appropriate. This is not a proven pharmacological washout and does not justify delaying assessment. Continue prescribed disease treatment and reassess relapse rather than automatically restarting experimental compounds.

COMMON MISTAKES

- Treating gut repair as a diagnosis, assuming all bloating indicates inflammation, or interpreting the name as a promised treatment outcome.
- Converting animal doses into personal doses or treating oral, intrarectal and injected exposure as interchangeable.
- Calling human-cell experiments human trials, interpreting endogenous LL-37 measurements as evidence for administering it, or confusing preventive mouse exposure with treatment of established disease.
- Adding several compounds together, masking symptoms with restrictive eating, or using subjective improvement to dismiss bleeding or abnormal tests. Scheduled review weeks never justify postponing needed care.

TRACKER FIELDS

Week number; week start date; primary symptom; clinician working diagnosis · Mean stools per day; predominant bristol type; urgency episodes; nighttime bowel movements; visible blood days · Mean pain 0 to 10; worst pain 0 to 10; mean bloating 0 to 10; symptom interference 0 to 10 · Body weight kg; optional waist cm; resting heart rate bpm; blood pressure mmHg if indicated; mean sleep hours; training sessions · Food tolerance notes; diet changes; medication changes; missed meals; missed training · Experimental exposure if any; exposure amount and units; route; frequency; last exposure date; adverse events · Test name date result units; clinician review date; stop signal; action taken; next review date

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2. Dalmasso G et al. PepT1-mediated tripeptide KPV uptake reduces intestinal inflammation.. *Gastroenterology*, 2008. PMID 18061177 DOI 10.1053/j.gastro.2007.10.026 (Grade C: oral KPV in mouse colitis. Grade D: PepT1-mediated uptake and inflammatory signaling in cultured cells. Does not establish a human regimen.)
3. Gubatan J et al. Cathelicidin Mediates a Protective Role of Vitamin D in Ulcerative Colitis and Human Colonic Epithelial Cells.. *Inflammatory bowel diseases*, 2020. PMID 31955203 DOI 10.1093/ibd/izz330 (Grade C for gut-treatment extrapolation: intrarectal LL-37 before and during mouse colitis induction. Includes human observational associations and grade D cell mechanisms, not human LL-37 treatment.)

PROTOCOL 04 · HYPERTROPHY

Clean Bulk (GH Axis)

BEGINNER · 12 WEEKS · CORE: CJC-1295, IPAMORELIN · SUPPORT: BPC-157

A 12-week educational framework for evaluating GH-axis claims, organizing hypertrophy fundamentals, and tracking meaningful outcomes. Human studies establish hormone responses to individual compounds. They do not establish that this combination produces additional muscle growth or has an acceptable safety profile over 12 weeks. Beginner describes the educational level, not suitability for self-treatment. The calendar organizes assessment, not peptide administration.

WHO IT IS FOR

Adults with established resistance-training habits who want to distinguish documented pharmacology from bodybuilding claims and prepare an informed clinical discussion. The useful outcome is a reproducible training, nutrition, recovery, and monitoring record.

WHO SHOULD NOT RUN IT

This is unsuitable as a self-directed drug regimen. Pregnancy, breastfeeding, active cancer, unexplained masses, pituitary disease, uncontrolled diabetes, untreated sleep apnea, and significant cardiovascular disease require particular caution and clinical assessment. These are precautionary exclusions, not a validated contraindication list for this untested combination. Under the 2026 WADA Prohibited List, all three compounds are prohibited at all times. CJC-1295 and ipamorelin fall under S2; BPC-157 falls under S0.

THE LOGIC

The hierarchy describes assessment priorities, not a validated sequence of peptide administration. First, investigate persistent inflammation, recurrent illness, and injuries that restrict training. Normal exercise soreness does not establish an inflammatory disorder. BPC-157 appears only as optional evidence to examine. Animal repair findings do not establish immune protection or human tendon healing. Second, assess energy availability and unexplained fatigue. Third, stabilize sleep, stress, and recovery, including evaluation for sleep apnea when indicated. Fourth, review glucose regulation and cardiovascular risk because GH-axis stimulation raises metabolic concerns. These concerns do not quantify adverse-event rates for this exact combination. Then evaluate tissue loading and anabolic claims. CJC-1295 illustrates sustained GHRH activity and increased GH and IGF-1 exposure. Ipamorelin illustrates ghrelin-receptor-mediated GH release. Complementary mechanisms do not demonstrate additional hypertrophy or establish combination safety. The cited CJC-1295 studies used the long-acting, albumin-binding compound commonly described as containing DAC. Their pharmacokinetics cannot be transferred to substances called CJC-1295 without DAC. Evidence B applies to the individual compounds' short-term human endocrine findings. BPC-157 has evidence C for musculoskeletal benefit because human evidence is too weak to establish efficacy. Claims that this exact combination improves hypertrophy have evidence D, reflecting mechanistic speculation rather than a demonstrated treatment effect.

COMPONENTS · DOSES AS REPORTED IN THE SOURCES NAMED

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
CJC-1295	Evidence review of sustained GHRH stimulation. Short human studies support increased GH and IGF-1, not established hypertrophy outcomes.	PMID 17018654 reports 60 or 90 mcg/kg CJC-1295 as a single subcutaneous administration, with hormone assessment one week later. These are experimental study exposures, not recommended starting doses. PMIDs 16352683 and 17018654 support short-term human endocrine findings, graded B because the trials were brief. PMID 16352683 reports a half-life of 5.8 to 8.1 days and evidence of accumulation. Neither paper establishes additional hypertrophy from this combination.	Subcutaneous in the cited human research; the findings concern long-acting, albumin-binding CJC-1295. · Single administration in PMID 17018654. PMID 16352683 investigated repeated subcutaneous administration at weekly or biweekly intervals, not a validated 12-week hypertrophy schedule.	No demonstrated hypertrophy advantage from administration before training, after training, while fasting, or before sleep. Prolonged exposure does not establish a useful workout-timing strategy.	Reviewed during weeks 1 to 12; no drug-active weeks are assigned. The placebo-controlled studies in PMID 16352683 lasted 28 and 49 days.	No validated beginner titration exists. Study dose groups are not instructions for individual escalation. Symptoms or a slow scale response do not justify increasing exposure.
Ipamorelin	Evidence review of ghrelin-receptor-mediated GH release. Human pharmacology supports an acute hormone response; combination-related muscle gain remains unestablished.	PMID 25331030 reports 0.03 mg/kg ipamorelin by intravenous infusion twice daily, from postoperative day 1 through day 7 or hospital discharge. This hospital regimen studied postoperative ileus, not hypertrophy. PMID 10496658 documents human pharmacokinetics, an approximately two-hour terminal half-life, and acute GH release. PMID 25331030 supplies the reported clinical dose. It found no significant difference from placebo in key or secondary efficacy analyses. Evidence B describes limited human studies, not demonstrated hypertrophy efficacy.	Intravenous in the cited clinical regimen. It does not validate a subcutaneous bodybuilding equivalent. · Twice-daily intravenous infusion describes the short inpatient regimen in PMID 25331030. No validated frequency exists for this proposed hypertrophy combination.	No established relationship to resistance training, fasting windows, or bedtime for muscle growth. Hospital feeding endpoints do not establish sports-nutrition timing.	Reviewed throughout the framework; no drug-active weeks are assigned. The inpatient exposure in PMID 25331030 was at most seven days.	No evidence-based escalation sequence exists for healthy lifters. Different research dose groups do not establish a personal titration ladder.
BPC-157	Optional evidence review when an injury limits training. It is not established protection against injury, inflammation, or GH-axis adverse effects.	250 to 500 mcg subcutaneously once daily is commonly cited in non-clinical use; not validated in trials. This describes circulating practice, not an established effective dose or a characterized safety profile. PMID 40756949 included 35 preclinical studies and one retrospective clinical study. PMID 41898733 discusses additional small human pilot studies. Evidence C applies to musculoskeletal benefit because human evidence remains too weak to establish efficacy. Neither review validates the reported subcutaneous practice.	Subcutaneous describes the non-clinical practice above. Human pilot studies involving other routes cannot validate it. · Once-daily subcutaneous administration describes non-clinical practice only; an effective human musculoskeletal frequency is unestablished.	No validated timing relative to meals, training, or sleep. Symptoms still require diagnosis and appropriate rehabilitation.	No automatic inclusion and no assigned active weeks. An unresolved injury warrants reassessment of the training plan.	No validated initiation, escalation, maintenance, or tapering sequence exists. Persistent pain calls for reassessment rather than increased experimental exposure.

WEEK BY WEEK

WEEK	ACTIONS	WATCH
1 to 2	Establish the baseline before changing the program. Record morning weight, waist, blood pressure, resting pulse, sleep, food intake, and repeatable performance measures. Review medical history and investigate persistent injury or illness.	Large daily fluctuations, unresolved pain, recurrent illness, snoring with daytime sleepiness, or abnormal baseline glucose.
3 to 4	Stabilize meal patterns, adequate energy intake, sleep opportunity, and training attendance. Review the distinction between hormone endpoints and muscle outcomes. Any exposure within a clinical study follows that study's protocol, not this calendar.	Rapid weight increases accompanied by swelling, rising waist circumference, poor recovery, or declining exercise tolerance.
5 to 6	Compare two-week averages rather than isolated weigh-ins. Review training progression and nutrition adherence. If GH-axis exposure has occurred, clinical review may include glucose and age-adjusted IGF-1 reassessment.	New tingling, hand tightness, persistent headache, worsening snoring, rising blood pressure, or increasing fasting glucose.
7 to 8	Assess whether performance changes persist across comparable sessions. Adjust training workload for recovery and joint tolerance. Investigate a stalled bulk through intake and program adherence before attributing it to inadequate hormone stimulation.	Repeated performance decline, pain that changes technique, escalating fatigue, or apparent lean-mass gains accompanied by fluid retention.
9 to 10	Keep measurement conditions consistent and limit unnecessary program changes. Review all adverse symptoms and actual exposures. Decide which outcomes will be reassessed at completion.	Accumulating adverse symptoms, progressively poorer sleep, or reliance on pain relief to maintain excessive loading.
11 to 12	Complete the planned training block and compare baseline with final averages. Review glucose, HbA1c when appropriate, and clinically indicated IGF-1. Document any supervised treatment endpoint and arrange follow-up.	Persistent edema, metabolic deterioration, unresolved neurological symptoms, or pressure to extend exposure because results are disappointing.

PRE-CHECKS

- Collect a baseline week of morning body weight, resting heart rate, and seated blood pressure using a correctly sized cuff. Measure waist at the same anatomical location.
- Record sleep duration, awakenings, snoring, daytime sleepiness, food intake, training frequency, exercise loads, and injury limitations.
- A clinician can assess fasting glucose, HbA1c, lipids, and age-adjusted IGF-1 when GH-axis exposure is being considered or has occurred. Normal results do not establish safety.
- Review kidney and liver function when clinically relevant. CBC, thyroid testing, or additional endocrine investigations should follow symptoms and history rather than an automatic extensive panel.
- Document diabetes, hypertension, edema, neuropathy, sleep apnea, malignancy, pituitary disease, pregnancy possibility, medications, supplements, and prior hormone use. A random GH measurement cannot reliably characterize pulsatile secretion.

MONITORING

- Each week compare average body weight, waist, standardized performance, training attendance, and recovery. Strength improvements alone do not prove hypertrophy.
- Summarize several resting blood pressure and pulse readings, sleep quality, edema, headaches, tingling, appetite, thirst, and urinary frequency.
- If exposure occurs under supervision, the clinician determines glucose and IGF-1 testing intervals. Record laboratory dates and time since exposure. A supraphysiological IGF-1 value is not a validated hypertrophy target.
- Keep dietary carbohydrate, hydration, and measurement conditions reasonably consistent when comparing body-composition results. Water shifts can distort estimated lean mass.

STOP RULES

- Stop experimental exposure and obtain emergency care for chest pain, severe breathlessness, fainting, facial or tongue swelling, or sudden neurological symptoms.
- Severe headache with visual changes requires urgent assessment, especially during GH-axis exposure.
- Repeated systolic blood pressure at or above 180 mmHg, or diastolic pressure at or above 120 mmHg, warrants urgent clinical contact. Associated chest pain, breathlessness, visual changes, or neurological symptoms require emergency care. Symptoms warrant emergency care even below these thresholds.
- New persistent edema, rapid unexplained weight gain, palpitations, hand numbness, or worsening sleep-apnea symptoms require stopping exposure and prompt clinical review.
- Repeated fasting glucose at or above 126 mg/dL warrants prompt assessment. Random glucose at or above 200 mg/dL with excessive thirst or urination also warrants prompt assessment. Home readings need clinical confirmation; these are evaluation triggers, not a complete diagnostic algorithm.
- Fever, spreading redness, severe localized pain, or a hot swollen joint after any administered product requires urgent evaluation.

EXPECTED TIMELINE

Training and nutrition trends become easier to interpret over several weeks. CJC-1295 can change endocrine markers within days, as documented in PMID 16352683, but that does not predict muscle gain. No defensible number of kilograms, response deadline, or guaranteed recomposition outcome exists for this combination.

EXIT PLAN

At week 12, close the training block and review performance, symptoms, and laboratory changes. No validated taper or post-cycle regimen exists for this combination. If exposure occurred, the supervising clinician determines discontinuation and follow-up. PMID 16352683 reports prolonged endocrine effects, including IGF-1 remaining above baseline for up to 28 days after repeated administration. Immediate post-discontinuation testing therefore may not represent a recovered baseline. The reported half-life does not establish an individual recovery deadline. Follow-up depends on symptoms, glucose, IGF-1, actual exposure, and clinical findings. Persistent abnormalities require assessment rather than automatic repetition of the training or exposure calendar.

COMMON MISTAKES

- Treating a higher GH or IGF-1 result as proof of additional muscle growth.
- Applying long-acting CJC-1295 evidence to a different compound described as without DAC.
- Converting an inpatient intravenous study into a home subcutaneous schedule.
- Calling fluid-related weight gain a successful clean bulk.
- Using BPC-157 to postpone diagnosis or override rehabilitation limits.

TRACKER FIELDS

Average morning weight kg · Waist cm · Average systolic bp mmHg · Average diastolic bp mmHg · Average resting heart rate bpm · Average sleep hours · Sleep quality 0 to 10 · Average daily energy kcal · Average daily protein g · Training sessions completed · Benchmark exercise load repetitions and effort · Pain location and score 0 to 10 · Edema headache tingling or other symptoms · Actual compound form dose unit route frequency and dates if applicable · Laboratory date results and reference ranges · Clinician review and action

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6. Yuan C et al. From Regeneration to Analgesia: The Role of BPC-157 in Tissue Repair and Pain Management.. *International journal of molecular sciences*, 2026. PMID 41898733 DOI 10.3390/ijms27062876 (Updated discussion of preclinical repair mechanisms and limited human pilot studies. It does not establish efficacy for the cited subcutaneous practice.)

PROTOCOL 05 · HYPERTROPHY

Advanced Hypertrophy

ADVANCED · 10 WEEKS · CORE: CJC-1295, IPAMORELIN, IGF-1 LR3 · SUPPORT: PEG-MGF

A 10-week framework for evaluating anabolic peptide claims, documenting training outcomes, and recognizing adverse effects. Published exposures are described where available. This combination has no validated human hypertrophy protocol. Active dosing weeks, escalation steps, and expected muscle gains cannot be established from the cited evidence.

WHO IT IS FOR

Experienced adult trainees seeking to understand GH and IGF-1 pathways, distinguish laboratory findings from clinical outcomes, and discuss exposure with a clinician. Advanced describes the complexity of the evidence and risks. It does not establish eligibility for self-administration.

WHO SHOULD NOT RUN IT

This framework does not establish medical suitability for exposure. Pregnancy, breastfeeding, active cancer, unexplained masses, uncontrolled diabetes, recurrent hypoglycemia, untreated sleep apnea, and significant cardiovascular disease require particular clinical attention. These investigational compounds lack validated hypertrophy prescribing criteria. All four are prohibited at all times under the WADA 2026 Prohibited List, section S2. CJC-1295 and ipamorelin are named; IGF-1 analogues and mechano growth factors are covered classes.

THE LOGIC

The assessment begins with persistent illness, unresolved injury, and inflammatory symptoms that could affect training. Identifying these problems does not imply suppressing normal exercise inflammation or adding an immune peptide. Next assess energy availability, food intake, and recovery demands. Then review sleep, stress, stimulant use, and possible sleep apnea. Evaluate metabolic context through glucose status, blood pressure, and waist trends. Tissue loading and anabolic claims come last, once recovery capacity is understood. This is an organizational framework, not a biological hierarchy validated in peptide trials. CJC-1295 appears first because it stimulates the GHRH receptor and has short-term human endocrine-response data. Ipamorelin follows because it stimulates the ghrelin receptor, another pathway involved in GH release. Complementary mechanisms do not establish superior hypertrophy or acceptable combined risk. IGF-1 LR3 acts farther downstream at the IGF-1 receptor, with altered binding-protein interactions. Its inclusion increases uncertainty rather than completing a proven pathway. PEG-MGF appears only as an educational comparison. Evidence about endogenous MGF or synthetic fragments does not validate a pegylated human treatment. The combined hypertrophy hypothesis is grade D, reflecting mechanistic reasoning without demonstrated clinical benefit. Component grades apply to the stated endpoint and cannot be transferred to the combination.

COMPONENTS · DOSES AS REPORTED IN THE SOURCES NAMED

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
CJC-1295	Long-acting GHRH analogue. Grade B for short-term human endocrine pharmacology. Grade C for hypertrophy claims because the human measurements do not establish muscle growth or strength benefits.	PMID 16352683 reports 30 or 60 mcg/kg subcutaneously among studied exposures. Its research schedules included single administration and separate repeated-administration arms using weekly or every-other-week intervals. The abstract does not map each amount to every schedule. These exposures do not establish a 10-week prescription. PMID 16352683 supports endocrine responses and prolonged exposure. These findings cannot be transferred to short-acting modified GRF described as CJC-1295 without DAC.	Subcutaneous in PMID 16352683. The studied long-acting compound contains the albumin-binding modification commonly called DAC. · Single administration or weekly/every-other-week research schedules in PMID 16352683. No validated frequency exists for the proposed combination.	The cited trials do not establish a hypertrophy advantage from administration before training, after training, while fasting, or before sleep.	No active weeks assigned. PMID 16352683 describes studies lasting 28 and 49 days, without establishing a 10-week hypertrophy course.	No validated individual escalation steps. Ascending study cohorts do not establish a self-titration algorithm.
Ipamorelin	Ghrelin-receptor agonist that can stimulate GH release. Grade B for short-term human pharmacology and postoperative clinical exposure. Grade C for hypertrophy claims unsupported by those human endpoints.	PMID 25331030 used 0.03 mg/kg by intravenous infusion twice daily from postoperative day 1 through day 7 or hospital discharge. This inpatient research exposure does not establish a subcutaneous bodybuilding dose. PMIDs 25331030 and 10496658. The postoperative trial found no significant differences in its key or secondary efficacy analyses. Neither study establishes muscle gain.	Intravenous in the cited human studies. A subcutaneous equivalent cannot be assumed. · Twice daily by intravenous infusion in PMID 25331030, for a postoperative indication. No established hypertrophy frequency.	No validated timing relative to resistance exercise, food, or sleep for hypertrophy. Postoperative meal-tolerance testing does not establish a fasting administration rule.	No active weeks assigned. The repeated exposure in PMID 25331030 lasted up to seven days.	No validated hypertrophy escalation steps. The human pharmacokinetic study compared dose cohorts without establishing a long-term personal titration schedule.
IGF-1 LR3	Modified IGF-1 analogue with reduced affinity for IGF-binding proteins. Grade D for the cited myogenic-cell evidence. Human hypertrophy efficacy is not established.	No validated human dose, route, or frequency was identified in the cited evidence. PMID 15817840 examines cell cultures; PMID 42395176 reviews the clinical evidence gap. Neither establishes a numeric human hypertrophy regimen. PMIDs 15817840 and 42395176. Prescription recombinant IGF-1 dosing cannot be transferred to LR3. Class-based risk concerns are not compound-specific incidence estimates.	No established human therapeutic route for hypertrophy. Cell-culture exposure cannot be converted into a human administration route. · Not established in human hypertrophy trials identified by the cited review.	Claims about post-workout targeting, local muscle growth, protection from hypoglycemia through meals, or bedtime use are not validated by the cited evidence.	No active weeks assigned. No evidence-based introductory, loading, or finishing phase was identified.	No validated starting dose or escalation steps. Hypoglycemia is a concern from IGF-related pharmacology; its incidence with LR3 is not established.
PEG-MGF	Educational comparison of a pegylated MGF-related peptide. Grade D for human hypertrophy claims. Related MGF research does not establish equivalence to PEG-MGF.	No validated human dose, route, or frequency was identified. PMID 37171185 reviews related MGF biology; PMID 42395176 discusses PEG-MGF evidence limitations. Neither supplies a validated human hypertrophy regimen. PMIDs 37171185 and 42395176. Endogenous MGF, synthetic E-domain fragments, and PEG-MGF are distinct evidence categories. The cartilage review does not establish a human muscle-growth treatment.	No established human therapeutic route for this goal. · Not established. Weekly schedules cannot be inferred from pegylation alone.	No verified advantage from rest-day, post-training, fed, fasted, or bedtime administration.	No active weeks assigned. Inclusion in this comparison does not imply evidence supporting addition to the other compounds.	No validated titration steps or evidence-based method for adding it to the other compounds.

WEEK BY WEEK

WEEK	ACTIONS	WATCH
1	Complete baseline measurements and medical-history review. Document any existing exposure accurately. Identify unresolved illness, injury, or unexplained symptoms before progressing training.	Fever, persistent pain, swelling, unusual fatigue, and uncertainty about actual compound identity.
2	Review food intake, meal consistency, sleep opportunity, alcohol, and stimulant use. Investigate snoring or witnessed breathing pauses.	Under-fueling, daytime sleepiness, disrupted sleep, and excessive resting heart rate.
3	Review glucose, blood pressure, and relevant laboratory results with a clinician. Establish repeatable training benchmarks using consistent technique and effort.	Abnormal glucose, elevated blood pressure, or performance limited by recovery.
4	Audit CJC-1295 and ipamorelin evidence against the documented formulation and exposure history. Continue training records; this review supplies no escalation schedule.	Edema, hand tingling, joint discomfort, headaches, and appetite changes. These findings are not specific to peptide exposure.
5	Compare weight and waist trends with repetitions, loads, and recovery. Review symptoms and any clinician-directed glucose or IGF-1 measurements.	Rapid weight gain without functional improvement, particularly with swelling.
6	Review LR3 and PEG-MGF evidence gaps. Adjust training fatigue when needed. A plateau does not establish a pharmacological indication.	Persistent soreness, declining performance, hypoglycemic symptoms, or pressure to add compounds.
7 to 8	Repeat standardized performance assessments. Discuss any existing exposure and laboratory abnormalities with the clinician assessing the exposure.	Worsening sleep, neurological symptoms, sustained glucose deterioration, and increasing waist circumference.
9 to 10	Prepare the exit review. Repeat baseline measurements under similar conditions. Document unresolved symptoms, laboratory follow-up, and any last exposure date.	Persistent abnormalities requiring follow-up beyond the assessment window. Acute symptoms require action when they occur, regardless of the scheduled review.

PRE-CHECKS

- Record several days of seated blood pressure and resting heart rate using consistent conditions.
- Collect morning body weight, waist circumference at a fixed landmark, and reproducible performance benchmarks.
- Document sleep duration, quality, snoring, breathing pauses, injury history, and current training volume.
- Discuss fasting glucose and HbA1c with a clinician. Baseline age-adjusted IGF-1 may assist clinical assessment of GH-axis exposure.
- Review diabetes, hypoglycemia, pituitary disease, cancer history, retinopathy, edema, heart disease, pregnancy, breastfeeding, and all medicines or supplements.
- Consider renal function, electrolytes, and liver tests according to history and clinical assessment. Normal results or broad hormone panels do not establish suitability.

MONITORING

- Weekly: compare average morning weight, waist, blood pressure, and resting heart rate with baseline.
- Weekly: log exercises, loads, repetitions, effort, completed sessions, soreness, and joint symptoms.
- Weekly: summarize sleep, appetite, energy, edema, hand numbness, headaches, and visual symptoms.
- If exposure already exists, document each administration and discuss clinician-directed glucose monitoring. Weekly summaries cannot detect every acute hypoglycemic episode.
- Repeat glucose and IGF-1 testing when clinically indicated, particularly after symptoms or exposure changes. Higher IGF-1 is not an established hypertrophy treatment target.

STOP RULES

- Further exposure should stop pending urgent assessment for suspected hypoglycemia. Confusion, fainting, seizure, or inability to self-treat requires emergency care. Glucose below 70 mg/dL requires immediate attention; below 54 mg/dL is clinically significant. Monitoring must not delay treatment.
- Chest pain, severe breathlessness, new focal weakness, throat swelling, or severe headache with visual disturbance requires emergency care.
- Systolic blood pressure at or above 180 mmHg or diastolic pressure at or above 120 mmHg warrants prompt reassessment and urgent medical advice. Associated chest pain, breathlessness, neurological symptoms, or visual changes requires emergency care without waiting for another reading.
- Progressive edema, new persistent numbness, severe joint pain, or worsening sleep apnea symptoms warrants stopping further exposure and obtaining prompt clinical review.
- Repeated fasting glucose at or above 126 mg/dL or IGF-1 above the laboratory's age-adjusted range warrants withholding further exposure pending clinician review. Home glucose readings require clinical confirmation; neither finding supplies an automatic dose-adjustment rule.

EXPECTED TIMELINE

Training-related performance changes may appear before measurable hypertrophy. Early weight changes can reflect glycogen, food mass, or fluid. PMID 16352683 documents prolonged hormonal changes without demonstrating corresponding muscle growth. Ten weeks permits trend assessment but cannot establish whether an uncontrolled combination caused any improvement. Changes in training, food intake, sleep, and measurement conditions also affect interpretation.

EXIT PLAN

At week 10, compare baseline and final performance, waist, weight, sleep, symptoms, and relevant laboratory results. No validated taper, post-cycle therapy, or universal washout exists for this combination in the cited evidence. If exposure occurred, cessation and follow-up require clinical assessment. PMID 16352683 reports a CJC-1295 half-life of 5.8 to 8.1 days and prolonged IGF-1 elevation after repeated exposure. Effects may therefore outlast the final administration. Calendar completion does not establish physiological recovery. Follow-up continues until abnormalities are evaluated and appropriately managed. Human clearance times for LR3 or PEG-MGF cannot be inferred from these CJC-1295 findings.

COMMON MISTAKES

- Treating increased GH or IGF-1 as proof of hypertrophy or assigning the same evidence grade to endocrine and muscle outcomes.
- Confusing long-acting CJC-1295 with modified GRF without DAC.
- Converting intravenous research exposure into a subcutaneous regimen or combining separately studied schedules.
- Treating cell-culture findings, endogenous MGF biology, or a narrative review as proof of human treatment efficacy.
- Calling fluid retention muscle gain or interpreting normal laboratory results as evidence that exposure is harmless.

TRACKER FIELDS

Mean morning weight kg · Waist cm · Mean seated systolic bp mmHg · Mean seated diastolic bp mmHg · Mean resting heart rate bpm · Mean sleep hours and quality · Training sessions exercises loads repetitions effort · Food intake and appetite changes · Pain edema numbness headache visual symptoms · Glucose values mg dL with dates and context · Laboratory results with dates units reference ranges · Existing exposure compound formulation dose unit route frequency dates provenance · Adverse events and clinician actions

REFERENCES

1. Teichman SL et al. Prolonged stimulation of growth hormone (GH) and insulin-like growth factor I secretion by CJC-1295, a long-acting analog of GH-releasing hormone, in healthy adults.. *The Journal of clinical endocrinology and metabolism*, 2006. PMID 16352683 DOI 10.1210/jc.2005-1536 (Short-term human CJC-1295 research exposures, prolonged GH and IGF-1 responses, half-life, and cumulative effects. Does not establish hypertrophy efficacy or combination outcomes.)

2. Beck DE et al. Prospective, randomized, controlled, proof-of-concept study of the Ghrelin mimetic ipamorelin for the management of postoperative ileus in bowel resection patients.. *International journal of colorectal disease*, 2014. PMID 25331030 DOI 10.1007/s00384-014-2030-8 (Short intravenous ipamorelin exposure in postoperative patients. Key and secondary efficacy analyses found no significant differences. Does not support a hypertrophy regimen.)

3. Gobburu JV et al. Pharmacokinetic-pharmacodynamic modeling of ipamorelin, a growth hormone releasing peptide, in human volunteers.. *Pharmaceutical research*, 1999. PMID 10496658 DOI 10.1023/a:1018955126402 (Human ipamorelin pharmacokinetics and acute GH release after intravenous research exposure. Does not establish long-term muscle or combination outcomes.)

4. Pampusch MS et al. Production of recombinant porcine IGF-binding protein-5 and its effect on proliferation of porcine embryonic myoblast cultures in the presence and absence of IGF-I and Long-R3-IGF-I.. *The Journal of endocrinology*, 2005. PMID 15817840 DOI 10.1677/joe.1.06037 (Grade D porcine cell-culture evidence involving Long-R3-IGF-I and binding-protein interactions. Does not establish human dose, route, frequency, or hypertrophy efficacy.)

5. Liu Y et al. The role of mechano growth factor in chondrocytes and cartilage defects: a concise review.. *Acta biochimica et biophysica Sinica*, 2023. PMID 37171185 DOI 10.3724/abbs.2023086 (Related MGF biology in chondrocytes and cartilage, including unresolved mechanisms. Indirect background only; does not validate PEG-MGF administration or human hypertrophy claims.)

6. Dominikowski A et al. The emerging landscape of performance-enhancing peptides modulating GH-IGF1 axis: bridging the gap between clinical evidence and patient self-administration.. *Frontiers in endocrinology*, 2026. PMID 42395176 DOI 10.3389/fendo.2026.1822475 (Narrative review of evidence gaps, uncertain combination practices, endocrine and metabolic concerns, fluid retention, and clinical assessment. Reported practices do not constitute validated regimens or compound-specific risk estimates.)

PROTOCOL 06 · FAT LOSS

Fat Loss with a Muscle-Preservation Objective (Incretin Class)

INTERMEDIATE · 16 WEEKS · CORE: SEMAGLUTIDE, TIRZEPATIDE · SUPPORT: CJC-1295, IPAMORELIN

A 16-week educational framework for understanding clinician-managed incretin treatment while tracking nutrition, strength and recovery. Human trials support weight reduction, including fat loss. Complete muscle preservation is not established, and this combined framework has not been tested as a protocol.

WHO IT IS FOR

Adults with obesity, or overweight with a weight-related complication, whose clinician considers prescription weight management appropriate. STEP 1 and SURMOUNT-1 enrolled adults with BMI at least 30 kg/m2, or at least 27 kg/m2 with a qualifying complication. Both pivotal trials excluded diabetes. Training experience does not replace medical eligibility.

WHO SHOULD NOT RUN IT

This framework is unsuitable for cosmetic cutting in already lean athletes or weight loss during pregnancy. Label contraindications include personal or family history of medullary thyroid carcinoma, MEN2, or serious hypersensitivity to the selected medicine or its excipients. Both labels advise against use with severe gastroparesis. Active eating disorders, malnutrition and unexplained weight loss require assessment. Anyone with an active or recent malignancy, or a strong family history of hormone-sensitive cancer, should not run the growth hormone axis components (GHRH analogs, GHRPs, IGF-1 variants): these pathways stimulate cell growth, and the trials that exist excluded such participants.

THE LOGIC

Readiness assessment covers medical eligibility, concurrent illness, nutritional adequacy, hydration, sleep and psychological health. These are clinical considerations, without an established immune, recovery or metabolic treatment sequence. There is no evidence that an immune peptide or growth-hormone secretagogue must precede incretin treatment. Semaglutide activates GLP-1 receptors; tirzepatide activates GIP and GLP-1 receptors. They are alternative core treatments. Their labels advise against coadministration with another GLP-1 receptor agonist or another product containing the same active ingredient. Both have grade A evidence for weight reduction. Muscle preservation remains a separate objective. In the SURMOUNT-1 DXA substudy, approximately 75% of lost weight was fat and 25% lean mass in both treatment groups, PMID 39996356. These group averages do not predict an individual's losses. DXA lean mass includes water and nonmuscle tissue. CJC-1295 and ipamorelin have no established role in preventing incretin-associated lean-mass loss.

COMPONENTS · DOSES AS REPORTED IN THE SOURCES NAMED

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
Semaglutide	Alternative core treatment. Grade A for weight reduction; complete muscle preservation is not established.	Wegovy injection label: 0.25 mg subcutaneously once weekly during weeks 1 to 4 and 0.5 mg subcutaneously once weekly during weeks 5 to 8. Wegovy injection label: 1 mg subcutaneously once weekly during weeks 9 to 12 and 1.7 mg subcutaneously once weekly during weeks 13 to 16. These describe initial label escalation, without constituting individualized instructions. Wegovy US prescribing information, revised June 2026, sections 2.1 and 2.2: injection timing and initial escalation. PMID 33567185: STEP 1 exposure and weight-reduction efficacy.	Subcutaneous, injectable formulation. · Once weekly.	Wegovy injection label: the same day each week, at any time, with or without meals. No established training or bedtime advantage.	Weeks 1 to 16 describe initial escalation if this treatment is prescribed. Subsequent maintenance requires clinical reassessment.	The Wegovy injection label permits delaying escalation for four weeks when a step is not tolerated. STEP 1 studied a maintenance exposure of 2.4 mg subcutaneously once weekly after escalation, PMID 33567185. That trial exposure does not summarize every current maintenance option.
Tirzepatide	Alternative core treatment. Grade A for weight reduction; lean mass also declines during treatment.	Zepbound label: 2.5 mg subcutaneously once weekly for four weeks, followed by 5 mg subcutaneously once weekly. Zepbound label maintenance options for weight management are 5 mg, 10 mg or 15 mg subcutaneously once weekly, selected clinically. The initial phase is not a maintenance regimen. Zepbound US prescribing information, sections 2.1, 2.2 and 2.4: escalation, maintenance and administration timing. PMID 35658024: weight-reduction efficacy. PMID 39996356: body composition.	Subcutaneous. · Once weekly.	Zepbound label: any time, with or without meals. No established relationship to training or sleep.	Weeks 1 to 16 form an observation window if this treatment is prescribed. Escalation need not continue throughout.	Zepbound label: subsequent increases are 2.5 mg per subcutaneous once-weekly dose after at least four weeks at the current dose. Response and tolerability determine further escalation. Zepbound label: the maximum dose is 15 mg subcutaneously once weekly. No later-week dose target is assigned by this framework.
CJC-1295	Experimental context only, excluded from active scheduling. Grade B for short-term human GH and IGF-1 responses. The proposed muscle-preservation benefit is grade D, mechanistic speculation without direct clinical evidence.	PMID 16352683 studied long-acting CJC-1295 with DAC, including 30 mcg/kg or 60 mcg/kg subcutaneously as single administrations. These research exposures do not establish a fat-loss or muscle-preservation dose. PMID 16352683 evaluated endocrine responses in healthy adults. It did not evaluate muscle preservation during incretin treatment or establish long-term safety.	Subcutaneous in the cited study. · Single administration for the exposures described here.	No validated training, meal or bedtime timing for this objective.	None scheduled.	No validated titration for this objective. Findings for the long-acting DAC compound cannot establish a schedule for material described as CJC-1295 without DAC.
Ipamorelin	Experimental context only, excluded from active scheduling. Grade B describes limited human investigation in another indication. The proposed muscle-preservation benefit is grade D, mechanistic speculation without direct clinical evidence.	PMID 25331030 reported 0.03 mg/kg by intravenous infusion twice daily, from postoperative day 1 through day 7 or hospital discharge. This inpatient research exposure does not establish a subcutaneous physique-use dose. PMID 25331030 studied postoperative ileus. It did not assess fat loss, strength, incretin-associated lean-mass changes or long-term use.	Intravenous infusion in the cited trial. · Twice daily in postoperative inpatients.	No validated timing relative to training, food or sleep for muscle preservation.	None scheduled.	No validated titration for this objective. The cited trial found no statistically significant differences from placebo in its key or secondary efficacy analyses.

WEEK BY WEEK

WEEK	ACTIONS	WATCH
1 to 4	Document the clinician-selected treatment and initial label phase. Establish repeatable meals, an individualized protein target and two or three resistance sessions weekly according to capacity and recovery. Record baseline performance on repeatable exercises. This exercise frequency is a practical framework choice, not a tested incretin protocol.	Early satiety, nausea, bowel changes, hydration and missed meals. Reduced appetite does not confirm adequate nutrition.
5 to 8	Review tolerability before any prescribed escalation. Compare weekly weight averages and waist measurements. Assess protein distribution across meals and whether training volume matches recovery.	Persistent fatigue, dizziness, food aversion or declining repetitions at familiar loads. Investigate inadequate intake before attributing fatigue to medication alone.
9 to 12	Review strength trends, dietary adequacy and daily activity with the care team. Recheck glycemia near week 12 when clinically relevant. Record whether the prescribed dose remains stable or changes.	A smaller waist with maintained performance provides useful context but does not prove muscle preservation. Falling strength across several sessions warrants review.
13 to 16	Complete an outcome review covering weight, waist, strength, symptoms and relevant laboratory changes. Repeat body composition only under comparable conditions. Discuss maintenance or discontinuation before the observation period ends.	Persistent under-eating, treatment burden and unrealistic expectations. Week 16 may mark completion of initial escalation, rather than maximal treatment response.

PRE-CHECKS

- Record height, BMI, seven-day average morning weight, waist circumference, seated blood pressure and resting heart rate. Document strength benchmarks, habitual activity and optional baseline DXA.
- Obtain fasting glucose or HbA1c, renal function and electrolytes when clinically appropriate. Lipids and liver enzymes help characterize metabolic risk. Testing reflects history rather than a universal peptide panel.
- Review pancreatitis, gallstones, gastroparesis, kidney disease, retinopathy, medullary thyroid carcinoma, MEN2, pregnancy intentions, breastfeeding, eating-disorder history and previous weight-loss treatment.
- Review insulin, sulfonylureas, antihypertensives and oral medicines. Anesthesia or sedation requires advance disclosure because delayed gastric emptying can increase aspiration risk. No universal medication-holding interval is assigned here.
- For users of oral hormonal contraception, Zepbound labeling specifies nonoral contraception or an additional barrier method for four weeks after initiation and each escalation. This precaution does not apply equally to every contraceptive method.
- Record usual food intake, protein intake, sleep duration, snoring, daytime sleepiness and recovery. Investigate unexplained fatigue before establishing an energy deficit.
- CJC-1295 and ipamorelin are prohibited at all times under section S2 of [WADA's 2026 Prohibited List](https://www.wada-ama.org/sites/default/files/2025-09/2026list_en_final_clean_september_2025.pdf). Semaglutide and tirzepatide are monitored, not prohibited, under the [2026 Monitoring Program](https://www.wada-ama.org/sites/default/files/2025-09/2026_list_monitoring_program_en_final_clean_september_2025.pdf).
- Personal and family history of cancer, including hormone-sensitive and thyroid cancers, reviewed with a clinician before any growth hormone axis component.

MONITORING

- Weekly: compare seven-day mean body weight, waist, blood pressure, resting heart rate, appetite, bowel function, nausea and hydration.
- Track average protein and energy intake against individualized targets, completed resistance sessions, exercise loads, repetitions and perceived recovery.
- Record sleep hours, sleep quality, daily steps and fatigue. Persistent deterioration requires review even when weight is falling.
- Sustained loss exceeding roughly 1% of body weight weekly after early fluid shifts warrants review, especially with weakness. This is a practical review trigger, not a validated drug-stopping threshold.
- Substantial vomiting, diarrhea or dehydration warrants prompt assessment of renal function and electrolytes. Glucose monitoring depends on diabetes and concomitant medication; routine weekly laboratory panels are unnecessary.

STOP RULES

- Severe persistent abdominal pain, especially radiating to the back, requires urgent assessment. Both labels specify discontinuation when pancreatitis is suspected. Right-upper-abdominal pain with fever or jaundice also requires urgent evaluation.
- Inability to retain fluids, markedly reduced urination, fainting, or abdominal distension with vomiting and inability to pass stool or gas requires urgent care. Further dosing requires clinical review.
- Tongue or throat swelling, breathing difficulty or collapse requires emergency care. Both labels specify discontinuation for suspected serious hypersensitivity.
- Glucose below 54 mg/dL requires immediate hypoglycemia treatment under the established care plan and prompt clinical review. Seizure, unconsciousness, severe confusion or inability to swallow requires emergency assistance, regardless of the measured glucose.
- Both labels specify discontinuation of weight-loss treatment when pregnancy is recognized, with prompt prescriber contact. New or sudden visual loss requires urgent assessment.
- Persistent nutritional inadequacy, progressive weakness or sustained resting palpitations requires clinician assessment before further escalation. Wegovy labeling specifies discontinuation for a sustained increase in resting heart rate.

EXPECTED TIMELINE

Appetite and gastrointestinal effects may appear early. Weight, waist and performance trends become more interpretable over several weeks. STEP 1 and SURMOUNT-1 evaluated major outcomes at 68 and 72 weeks, respectively, PMIDs 33567185 and 35658024. Their average results are not 16-week forecasts. Neither weight reduction nor increased GH establishes preserved skeletal muscle.

EXIT PLAN

Week 16 is a decision point, not a mandatory drug holiday. Reassessment covers metabolic benefit, nutrition, strength, tolerability and eligibility for ongoing treatment. No validated taper reliably prevents regain. In the STEP 1 extension, participants regained about two-thirds of prior weight loss during the year after semaglutide and structured lifestyle intervention stopped, PMID 35441470. Nutrition, resistance training and weight tracking remain relevant after discontinuation. Wegovy and Zepbound labeling report approximate elimination half-lives of one week and five to six days, respectively. Substantial clearance takes several weeks. These estimates do not establish switching or pregnancy-planning intervals. For weight management, Wegovy labeling specifies discontinuation at least two months before planned pregnancy. Follow-up within four to eight weeks after stopping is a practical planning interval, individualized by the clinician.

COMMON MISTAKES

- Treating both incretins as a stack or assuming every escalation step is obligatory.
- Allowing appetite suppression to replace adequate meals and resistance training.
- Equating DXA lean mass with skeletal muscle or short-term water changes with tissue loss.
- Using endocrine-marker studies to justify experimental muscle-preservation add-ons.

- Planning an abrupt end without discussing maintenance and weight-regain risk.
- Confusing mg with mcg, or converting a dose to mL without the exact prescribed concentration.
- Treating preserved exercise performance as proof that no skeletal muscle was lost.

TRACKER FIELDS

Prescribed compound · Prescribed dose mg · Dose provenance · Route · Frequency · Administration dates · Missed doses · Dose change and reason · Mean morning weight kg · Weekly weight change percent · Waist cm · Mean blood pressure mmHg · Mean resting heart rate bpm · Mean daily energy kcal · Mean daily protein g · Resistance sessions completed · Benchmark exercise loads and repetitions · Mean daily steps · Mean sleep hours · Sleep quality 0 to 10 · Fatigue 0 to 10 · Appetite 0 to 10 · Gastrointestinal symptoms · Hydration concerns · Glucose if indicated mg dL · Laboratory results and dates · Adverse events · Clinician review and next action

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1. Wilding JPH et al. Once-Weekly Semaglutide in Adults with Overweight or Obesity.. *The New England journal of medicine*, 2021. PMID 33567185 DOI 10.1056/NEJMoa2032183 (Grade A for semaglutide weight reduction. STEP 1 evaluated 68 weeks of treatment with lifestyle intervention in adults without diabetes. It does not establish complete muscle preservation.)
2. Jastreboff AM et al. Tirzepatide Once Weekly for the Treatment of Obesity.. *The New England journal of medicine*, 2022. PMID 35658024 DOI 10.1056/NEJMoa2206038 (Grade A for tirzepatide weight reduction. SURMOUNT-1 evaluated 72 weeks of treatment in adults without diabetes and documented gastrointestinal adverse events during escalation.)
3. Look M et al. Body composition changes during weight reduction with tirzepatide in the SURMOUNT-1 study of adults with obesity or overweight.. *Diabetes, obesity & metabolism*, 2025. PMID 39996356 DOI 10.1111/dom.16275 (Grade B for this small DXA substudy, with 160 participants providing baseline and follow-up data. Fat and lean mass decreased; approximately 75% of lost weight was fat and 25% lean mass in both groups.)
4. Wilding JPH et al. Weight regain and cardiometabolic effects after withdrawal of semaglutide: The STEP 1 trial extension.. *Diabetes, obesity & metabolism*, 2022. PMID 35441470 DOI 10.1111/dom.14725 (Grade B for exploratory withdrawal follow-up. Substantial regain and movement of cardiometabolic measures toward baseline followed cessation of semaglutide and structured lifestyle intervention.)
5. Teichman SL et al. Prolonged stimulation of growth hormone (GH) and insulin-like growth factor I secretion by CJC-1295, a long-acting analog of GH-releasing hormone, in healthy adults.. *The Journal of clinical endocrinology and metabolism*, 2006. PMID 16352683 DOI 10.1210/jc.2005-1536 (Grade B for short human studies of endocrine responses to long-acting CJC-1295. These studies do not establish muscle preservation during weight loss or incretin treatment.)
6. Beck DE et al. Prospective, randomized, controlled, proof-of-concept study of the Ghrelin mimetic ipamorelin for the management of postoperative ileus in bowel resection patients.. *International journal of colorectal disease*, 2014. PMID 25331030 DOI 10.1007/s00384-014-2030-8 (Grade B for limited inpatient investigation documenting intravenous exposure. Key and secondary efficacy analyses showed no statistically significant benefit; physique dosing and muscle preservation were not studied.)

PROTOCOL 07 · FAT LOSS

Non-Incretin Recomposition

INTERMEDIATE · 12 WEEKS · CORE: AOD-9604, HGH FRAGMENT 176-191 · SUPPORT: CJC-1295, IPAMORELIN

A 12-week framework for evaluating non-incretin peptide claims, tracking fat loss and preserving training performance. The reviewed evidence does not establish this combination as an effective recomposition protocol. Reported research exposures below are evidence records, not personal dosing instructions.

WHO IT IS FOR

Adults who already resistance train and want to assess these compounds against measurable outcomes. Appropriate for understanding research limitations and preparing a clinician discussion. The calendar structures assessment, nutrition, recovery and follow-up. It does not establish a 12-week peptide treatment course.

WHO SHOULD NOT RUN IT

Not a self-directed treatment framework, especially during pregnancy or breastfeeding, or with active cancer, unexplained masses, pituitary disease or uncontrolled diabetes. Untreated sleep apnea, significant cardiovascular disease and previous hypersensitivity also require individualized assessment. These are clinical risk flags, not a validated contraindication list for this experimental combination. AOD-9604, hGH 176-191, CJC-1295 and ipamorelin are prohibited at all times under WADA S2. [WADA 2026 Prohibited List](https://www.wada-ama.org/sites/default/files/2025-09/2026list_en_final_clean_september_2025.pdf).

THE LOGIC

The sequence below organizes assessment and evidence review. It does not establish a biological hierarchy or proven peptide sequence. Active infection, inflammatory illness and unresolved injury require appropriate assessment. None of these four compounds has established immune-protection benefits in the reviewed studies. Energy availability, fatigue, neurological symptoms and sleep also affect interpretation of recovery and training performance.

Metabolic assessment centers on consistent intake, activity and waist measurements. AOD-9604 appears first in the evidence review because its development targeted obesity, not because it merits treatment priority. Its positive animal findings did not translate into established human efficacy. FDA's review describes a large randomized obesity study that found no significant weight-loss difference from placebo. The review also notes limited published methodological detail. [FDA December 2024 clinical evidence review, slides 103 to 105](https://www.fda.gov/media/183891/download).

HGH Fragment 176-191 is a related comparison topic. AOD-9604 is a modified C-terminal analogue; findings cannot automatically transfer to the native fragment. The reviewed evidence does not establish additive benefit from their combination. Early native-fragment experiments also challenge blanket claims of glucose neutrality.

CJC-1295 and ipamorelin enter the review as GH-axis compounds. Their documented hormonal effects do not establish fat loss, muscle preservation or improved sleep. Optional review does not mean automatic addition after a plateau. Resistance training and adequate recovery remain relevant throughout. No reviewed study validates the four-compound combination, its order or a 12-week escalation schedule.

COMPONENTS · DOSES AS REPORTED IN THE SOURCES NAMED

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
AOD-9604	Core evidence topic. Grade C for positive fat-loss rationale from animals; the human development record does not establish effective obesity treatment. Lipolysis is a mechanism, not proof of sustained fat loss.	PMID 11146367 reported 500 mcg/kg orally once daily for 19 days in obese Zucker rats. This animal exposure is not a human dose and must not be scaled directly by body weight. PMID 11146367 supplies the animal dose and metabolic findings. Reduced weight gain in rats must not be presented as an equivalent percentage of human weight loss.	Oral in the cited rat experiment. This does not validate subcutaneous administration. · Once daily in PMID 11146367; no validated human recomposition frequency is established by that animal study.	The cited study does not establish superior outcomes from timing exposure before training, during fasting or before sleep. It does not support meal restriction around exposure.	Evidence review during weeks 1 to 12; no active human treatment weeks assigned. The cited animal exposure lasted 19 days.	No validated human recomposition titration steps. Neither absent weight loss nor apparent tolerance establishes a reason to escalate.
HGH Fragment 176-191	Core comparison topic. Grade C for animal metabolic observations, with no verified human recomposition efficacy in the reviewed records. Native hGH 176-191 and modified AOD-9604 are distinct evidence categories.	No verified human dose with route and frequency was identified in the reviewed records. PMID 645904 reports single experimental rat exposures in molar units. Its abstract does not specify the peptide administration route sufficiently to document a complete regimen here. PMID 645904 examined native C-terminal fragments in rats, including hGH 176-191. It reported glucose elevation and reduced insulin sensitivity. It does not support human dosing or claims of glucose neutrality.	No clinically validated route for human fat loss was established by the reviewed evidence. · No validated repeated human schedule. A single animal exposure cannot establish daily human use.	The reviewed evidence does not establish a human fasting, pretraining, post-training or bedtime advantage.	Comparison and risk review during weeks 1 to 12; no active treatment weeks assigned.	No validated starting dose, increments or ceiling for human recomposition. A numerical schedule would exceed the verified evidence.
CJC-1295	Optional GH-axis evidence review. Grade B for small, short human pharmacodynamic trials; insufficient evidence for recomposition. The studied long-acting compound contains the albumin-binding modification commonly called DAC.	PMID 16352683 included 30 or 60 mcg/kg subcutaneously as a single administration in separate dose-ranging cohorts. These are examples of studied exposures, not a proposed weekly prescription. The publication also reports separate repeated-dose cohorts. PMID 16352683 documents GH and IGF-I increases, a 5.8 to 8.1 day estimated half-life and cumulative effects. Biochemical activity does not establish clinical recomposition benefit or long-term tolerability.	Subcutaneous in the cited human trials. Results cannot be transferred to formulations described as CJC-1295 without DAC. · PMID 16352683 included one-time administration and separate cohorts receiving two or three doses at weekly or every-two-week intervals.	The reviewed trials do not establish an advantage relative to meals, training or bedtime. Sustained exposure limits conclusions based on a brief administration window.	No active weeks assigned. The published studies lasted 28 and 49 days, not a validated 12-week fat-loss course.	Investigators used ascending-dose study designs. These do not establish an individual escalation algorithm based on sleep, soreness or scale weight.

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
Ipamorelin	Optional secretagogue evidence review. Grade B for limited human pharmacology and a short surgical trial; insufficient evidence for fat loss, muscle retention or improved sleep.	PMID 25331030 reported 0.03 mg/kg by intravenous infusion twice daily from postoperative day 1 through day 7 or hospital discharge. This inpatient regimen does not validate outpatient subcutaneous use. PMID 25331030 supplies the dose and found no significant difference in its key or secondary efficacy analyses. PMID 10496658 documents acute GH stimulation in healthy volunteers, not long-term fat loss.	Intravenous infusion in the cited surgical trial. · Twice daily during short postoperative treatment in PMID 25331030, not a validated 12-week schedule.	The study schedule related to postoperative care. The reviewed evidence does not establish a timing advantage relative to resistance training, food restriction or sleep.	No active weeks assigned. The cited treatment lasted up to seven postoperative days.	The cited regimen does not establish a recomposition titration strategy. No evidence-based escalation follows from a plateau or subjective recovery change.

WEEK BY WEEK

WEEK	ACTIONS	WATCH
1 to 2	Establish baseline measurements and review illness, injury, medicines and prior peptide exposure. Keep training and food intake consistent enough to interpret trends.	Unexplained fatigue, fever, worsening pain, abnormal blood pressure or glucose, and large day-to-day weight changes.
3 to 4	Review sleep regularity and inadequate recovery. Assess whether a sustainable dietary energy deficit, adequate protein and resistance training fit the individual's health and recovery.	Excessive hunger, deteriorating performance, persistent sleepiness, dizziness and menstrual disruption.
5 to 6	Compare weekly mean weight and standardized waist readings. Review AOD-9604 and fragment evidence with a clinician if considering research participation.	A plateau accompanied by inconsistent intake, reduced activity or fluid retention. It does not establish peptide failure or justify escalation.
7 to 8	Review training recovery and cardiometabolic measurements. Any discussion of GH-axis research should account for unresolved sleep or endocrine concerns.	Edema, tingling, headaches, rising glucose, worsening snoring or breathlessness.
9 to 10	Maintain consistent measurement conditions. Adjust one nutrition or activity variable at a time if progress and recovery justify it.	Rapid weight loss with falling strength, persistent exhaustion or increasing preoccupation with food.
11 to 12	Repeat baseline comparisons, document adverse events and prepare maintenance intake. Any actual research exposure follows the study's approved discontinuation and follow-up plan.	Persistent symptoms, unresolved laboratory abnormalities and water shifts that could distort the final body-composition estimate.

PRE-CHECKS

- Collect seven mornings of body weight, waist at a consistent anatomical landmark, seated blood pressure and resting heart rate. Record measurement conditions.
- Document habitual intake, training frequency, representative lift performance, daily steps, sleep duration and snoring or witnessed breathing pauses.
- Discuss fasting glucose or HbA1c and a lipid profile. Renal function, electrolytes and liver enzymes depend on history, medicines and clinical assessment.
- If GH-axis research participation is under consideration, discuss baseline age-adjusted IGF-I and pituitary history. A random GH measurement is generally uninformative because secretion is pulsatile.
- Review diabetes, edema, cardiovascular disease, cancer history, headaches, visual symptoms, pregnancy potential, eating disorders, medications and previous adverse reactions.

MONITORING

- Weekly: compare seven-day mean weight, standardized waist, average steps, dietary adherence and resistance-training performance.
- Weekly: summarize blood pressure, resting heart rate, sleep duration, sleep quality, hunger, fatigue, swelling and sensory symptoms.
- Document every actual exposure and concurrent medication change. Record events as associations unless causation has been assessed.
- Repeat glucose and other indicated laboratory tests according to baseline risk and clinician judgment; HbA1c is not a weekly response marker.

STOP RULES

- If exposure occurs, stop it and seek emergency care for breathing difficulty, facial or tongue swelling, chest pain, fainting or new focal neurological symptoms.
- Stop and obtain urgent assessment for severe headache with visual changes, rapidly increasing edema or new breathlessness.
- Repeated fasting glucose at or above 126 mg/dL, or random glucose at or above 200 mg/dL with thirst or frequent urination, requires prompt clinical assessment. Home readings warrant evaluation but do not independently confirm a diagnosis.
- Systolic pressure above 180 mmHg or diastolic pressure above 120 mmHg warrants repeat measurement after at least one minute and immediate medical contact if persistent. Accompanying chest pain, breathlessness or neurological symptoms require emergency care without waiting for reassessment. These adult thresholds do not cover pregnancy-specific emergencies. [American Heart Association blood-pressure emergency guidance](https://www.heart.org/en/health-topics/high-blood-pressure/understanding-blood-pressure-readings/when-to-call-911-for-high-blood-pressure).
- Stop and contact a clinician for spreading redness, warmth, drainage or fever following any administered product. Persistent tingling, worsening apnea symptoms or unexplained masses also warrant assessment.

EXPECTED TIMELINE

Early weight movement commonly reflects water, glycogen and digestive contents. Several weeks of consistent measurements are more informative than isolated readings. By week 12, assess waist, weight trend, strength and adverse events together. The reviewed evidence supplies no credible timeline for visible peptide-specific fat loss from this combination.

EXIT PLAN

At week 12, consolidate sustainable nutrition and training habits and reassess the original goals. The reviewed evidence establishes no taper, cycling schedule or universal washout for this combination. PMID 16352683 documents CJC-1295-related hormonal effects persisting for weeks, so clinical follow-up may extend beyond the final exposure. Any actual study participation follows its specified discontinuation and follow-up plan. Persistent symptoms or abnormal tests take priority over an arbitrary restart date.

COMMON MISTAKES

- Treating AOD-9604 and native hGH 176-191 as identical or assuming their combination adds benefit.
- Converting an animal dose directly into a human dose.
- Using increased GH or IGF-I as proof of fat loss or muscle gain.
- Confusing long-acting CJC-1295 with formulations described as without DAC.
- Interpreting fluid-related lean-mass changes as new muscle.
- Assigning an evidence grade to a compound without specifying the outcome being graded.

TRACKER FIELDS

Mean morning weight kg · Waist cm · Mean seated systolic bp mmHg · Mean seated diastolic bp mmHg · Mean resting heart rate bpm · Mean daily steps · Mean daily energy intake kcal · Mean daily protein g · Resistance sessions completed · Reference lift load and repetitions · Mean sleep hours · Sleep quality 0 to 10 · Hunger 0 to 10 · Fatigue 0 to 10 · Edema headache tingling or other symptoms · Actual compound formulation dose route frequency and dates if applicable · Medication changes · Laboratory test name date value units and reference range · Clinician review and next action

REFERENCES

1. Ng FM et al. Metabolic studies of a synthetic lipolytic domain (AOD9604) of human growth hormone.. *Hormone research*, 2000. PMID 11146367 DOI 10.1159/000053183 (Grade C. Oral AOD9604 exposure and reduced weight gain in obese rats; no human treatment schedule or established human fat-loss efficacy.)
2. Ng FM et al. Hyperglycemic action of synthetic C-terminal fragments of human growth hormone.. *The American journal of physiology*, 1978. PMID 645904 DOI 10.1152/ajpendo.1978.234.5.E521 (Grade C. Native fragments including hGH 176-191 affected glucose and insulin sensitivity in rats; the abstract does not specify peptide administration route.)
3. Teichman SL et al. Prolonged stimulation of growth hormone (GH) and insulin-like growth factor I secretion by CJC-1295, a long-acting analog of GH-releasing hormone, in healthy adults.. *The Journal of clinical endocrinology and metabolism*, 2006. PMID 16352683 DOI 10.1210/jc.2005-1536 (Grade B for small, short human pharmacodynamic trials. Documents subcutaneous exposure, persistent GH and IGF-I effects and accumulation; no recomposition efficacy endpoint.)
4. Gobburu JV et al. Pharmacokinetic-pharmacodynamic modeling of ipamorelin, a growth hormone releasing peptide, in human volunteers.. *Pharmaceutical research*, 1999. PMID 10496658 DOI 10.1023/a:1018955126402 (Grade B for acute human pharmacology. Documents GH stimulation, not sustained fat loss, muscle retention or improved sleep.)
5. Beck DE et al. Prospective, randomized, controlled, proof-of-concept study of the Ghrelin mimetic ipamorelin for the management of postoperative ileus in bowel resection patients.. *International journal of colorectal disease*, 2014. PMID 25331030 DOI 10.1007/s00384-014-2030-8 (Grade B for a short clinical trial. Documents intravenous dosing in surgical patients and no significant key or secondary efficacy differences; no recomposition evidence.)

PROTOCOL 08 · LONGEVITY

Metabolic and Mitochondrial Reset

INTERMEDIATE · 8 WEEKS · CORE: MOTS-C, SS-31 · SUPPORT: NAD+

An eight-week framework for evaluating mitochondrial and metabolic claims, establishing a reproducible baseline, and reviewing measurable outcomes. Reset is an organizational title, not a demonstrated biological effect. No cited study validates this combination, sequence, or duration for extending human lifespan.

WHO IT IS FOR

Adults who train consistently and want to understand MOTS-c, SS-31, and optional NAD+ evidence before discussing eligibility with a clinician. The schedule organizes assessment and follow-up. Reported experimental and prescription doses describe source material and do not establish a personal administration plan.

WHO SHOULD NOT RUN IT

People seeking a proven anti-aging drug cycle, treatment for unexplained fatigue without evaluation, or a substitute for diabetes care. Pregnancy, breastfeeding, active infection, unstable cardiovascular disease, and significant kidney or liver disease require separate medical assessment. Serious hypersensitivity to elamipretide or its excipients is a labeled contraindication. MOTS-c is prohibited at all times under section S4.4.1 of the WADA 2026 Prohibited List. WADA section M2.2 also restricts intravenous infusions and injections independently of the substance. Source: [WADA 2026 Prohibited List](https://www.wada-ama.org/sites/default/files/2025-09/2026list_en_final_clean_september_2025.pdf). Anyone with an active or recent malignancy, or a strong family history of hormone-sensitive cancer, should not run the growth hormone axis components (GHRH analogs, GHRPs, IGF-1 variants): these pathways stimulate cell growth, and the trials that exist excluded such participants.

THE LOGIC

The assessment starts with potential illness, inadequate recovery, sleep disruption, and medication effects before interpreting metabolic or functional measurements. This is an editorial assessment sequence, not a validated biological hierarchy or order for administering compounds. Infection, inflammatory disease, insufficient food intake, or medication effects can explain fatigue and distort an apparent response. Persistent symptoms warrant diagnosis before attribution to mitochondrial dysfunction.

SS-31, also called elamipretide, comes first in the evidence review because it targets cardiolipin-associated mitochondrial membrane function and has human intervention data. Its FDA accelerated approval concerns muscle strength in Barth syndrome in patients weighing at least 30 kg. Approval rests on an intermediate endpoint and may require confirmatory evidence of clinical benefit. It does not establish general longevity efficacy. Source: FORZINITY prescribing information, September 2025.

In MMPOWER-3, treatment did not improve the primary walking-distance or fatigue outcomes in primary mitochondrial myopathy, PMID 37268435. Disease-specific approval therefore cannot establish benefit in healthy trainees. A regular sleep window, adequate food intake, and stable training reduce major confounders. None of the cited studies establishes this sequence as treatment for insomnia or impaired recovery.

MOTS-c is reviewed next because its experimental actions involve metabolic signaling, including AMPK activation. Mouse treatment findings and human exercise-associated changes in endogenous MOTS-c represent different evidence categories. Neither establishes that administering MOTS-c improves human healthspan.

NAD+ is optional because it is a metabolic cofactor, not a peptide. Its small intravenous pilot measured circulating and urinary metabolites over a short observation period. It did not establish durable mitochondrial restoration. No cited evidence shows that adding NAD+ improves either other compound. Additional tissue-repair or anabolic exposures would further weaken attribution.

COMPONENTS · DOSES AS REPORTED IN THE SOURCES NAMED

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
SS-31	Core energy-related evidence review. Grade A reflects approved-drug status for a specific disease under this product's scale. Accelerated approval does not establish longevity efficacy. MMPOWER-3 supplies human randomized evidence with negative primary efficacy results. Healthy-adult longevity benefit remains unestablished.	MMPOWER-3 reported elamipretide 40 mg subcutaneously once daily for 24 weeks in adults with primary mitochondrial myopathy, PMID 37268435. This trial exposure does not establish an eight-week longevity dose. PMID 37268435 supplies the trial dose, route, frequency, duration, and outcomes. The FORZINITY label supplies indication-specific administration and contraindication information. Neither source tests this combination.	Subcutaneous in PMID 37268435 and the approved formulation. · Once daily in PMID 37268435.	The FDA label specifies the same time each day. Neither cited source establishes optimal timing relative to training, meals, or sleep. Source: [FORZINITY prescribing information, September 2025] (https://www.accessdata.fda.gov/drugsatfda_docs/label/2025/215244s000lbl.pdf).	Evidence review during weeks 2 and 3. No automatic treatment weeks are assigned. Any prescribed exposure follows its clinical indication and prescriber.	No validated longevity titration exists. The trial used a fixed regimen. The FDA label requires dose reduction in adults with severe renal impairment. Dialysis dosing is not established.

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
MOTS-c	Core metabolic-signaling evidence review. Grade C for treatment claims based on mouse experiments. Human exercise-associated endogenous changes do not establish efficacy or safety of administered MOTS-c.	Lee and colleagues reported MOTS-c 0.5 mg/kg intraperitoneally once daily for eight weeks in a mouse high-fat-diet experiment, PMID 25738459. This animal exposure does not establish a human dose. PMID 25738459 supports the mouse exposure and metabolic findings. PMID 33473109 separates mouse treatment outcomes from human endogenous exercise responses. Neither study supplies a validated human administration regimen.	Intraperitoneal in the cited mouse experiment. It does not validate a human subcutaneous regimen. · Once daily in the cited eight-week mouse experiment, PMID 25738459.	No validated human timing relative to training, food, or sleep is established by these references. Exercise-induced endogenous changes do not establish a preworkout administration window.	Evidence review during weeks 4 and 5. No human active-treatment weeks are established by these sources.	No supported human starting dose, escalation steps, or maintenance schedule can be derived from the cited animal studies.
NAD+	Optional cofactor-related evidence review. Grade B for a small randomized human infusion and metabolite pilot. Grade C for longevity claims because the available human observations cannot support that outcome.	Grant and colleagues reported 750 mg NAD+ intravenously over six hours as a single study infusion, PMID 31572171. This metabolite experiment did not validate a recurring longevity regimen. PMID 31572171 randomized eight participants to NAD+ and three to saline control, with short observation of metabolites. It did not test this combination, exercise adaptation, or lifespan.	Intravenous in PMID 31572171. These findings do not establish equivalent oral, intramuscular, or subcutaneous effects. · One study infusion in PMID 31572171, without an established weekly maintenance frequency.	The study collected baseline samples after an overnight fast, PMID 31572171. That experimental control does not establish a fasting requirement for benefit. Optimal timing relative to training and sleep remains unknown.	Optional evidence review in week 6. No routine infusion weeks are assigned.	No validated eight-week escalation, loading phase, or maintenance schedule was established. Infusion tolerability and clinical decisions require the supervising clinician.

WEEK BY WEEK

WEEK	ACTIONS	WATCH
1	Collect baseline measurements across several ordinary days. Record training, meals, caffeine, alcohol, and sleep. Identify one primary outcome, such as fatigue during a repeatable activity.	Acute illness, persistent unexplained fatigue, snoring with daytime sleepiness, or declining exercise tolerance.
2	Review medical history, baseline results, and reversible causes with a clinician where indicated. Examine SS-31 evidence and distinguish its accelerated approval from longevity claims.	Abnormal glucose, kidney results, blood pressure, or symptoms requiring diagnostic follow-up.
3	Repeat the same submaximal walking or cycling task under similar conditions. Maintain a consistent sleep window and training load. Document any independently prescribed treatment.	Changes in exertion, heart rate, recovery, sleep, and any treatment-associated symptoms.
4	Review MOTS-c animal findings alongside human endogenous exercise data. Compare weekly averages with baseline. Record dietary or training changes that could explain differences.	Overinterpretation of a single workout, glucose reading, or wearable recovery score.
5	Repeat waist, weight averages, and the standardized activity. Check whether perceived improvement appears across multiple observations and whether function improves without increased fatigue.	Persistent resting-heart-rate elevation, insomnia, reduced exercise tolerance, or symptomatic glucose changes.
6	Review optional NAD+ evidence and its limited outcomes. Record the decision and rationale. The schedule assigns an evidence review without establishing an infusion indication.	Confusing altered plasma metabolites or a transient sensation with durable clinical benefit.
7	Keep measurement conditions stable. Prepare a record of symptoms, functional outcomes, exposures, adverse events, and unresolved questions for the final review.	Escalating training, changing several supplements, or restricting calories enough to obscure interpretation.
8	Repeat baseline measurements and clinically indicated laboratory tests. Review the primary outcome, adverse events, and next steps. End the assessment without automatic cycling.	Unresolved abnormalities, worsening function, or pressure to continue despite no measurable benefit.

PRE-CHECKS

- Measure seated blood pressure and resting heart rate on several days after quiet rest, using consistent equipment and conditions.
- Record morning body-weight averages, waist circumference, usual training volume, and a reproducible submaximal functional task.
- Log sleep duration, awakenings, sleep quality, daytime sleepiness, fatigue, and exercise recovery for one week.

MONITORING

- Compare weekly blood-pressure and resting-heart-rate averages with baseline, noting illness, caffeine, heat, and hydration.
- Track average weight, waist, sleep duration, fatigue, and recovery using the same methods each week.
- Repeat the same submaximal task and record duration or distance, heart rate, and perceived exertion.

- Discuss fasting glucose or HbA1c and a lipid panel according to metabolic risk and routine screening needs.
- If pharmacologic exposure is being considered clinically, review creatinine/eGFR, electrolytes, and liver chemistry. CBC, thyroid testing, or iron studies depend on symptoms and history.
- Review diabetes treatment, hypoglycemia, kidney disease, cardiovascular symptoms, allergies, pregnancy status, medications, and supplements. Document previous serious hypersensitivity to elamipretide or formulation ingredients. Baseline testing does not establish safety.
- Personal and family history of cancer, including hormone-sensitive and thyroid cancers, reviewed with a clinician before any growth hormone axis component.
- Monitor glucose at a clinician-agreed frequency when diabetes, glucose-lowering medication, or symptoms make it relevant.
- Record all exposures and adverse events, including administration-site reactions and possible hypersensitivity. Repeat laboratory tests for clinical indications rather than assuming weekly testing is necessary.

STOP RULES

- Stop an ongoing administration and seek emergency care for breathing difficulty, facial or throat swelling, widespread hives with dizziness, collapse, or severe chest pain.
- New fainting, persistent palpitations, or disproportionate breathlessness requires prompt clinical assessment before further exposure or strenuous exercise.
- Glucose below 70 mg/dL requires prompt attention under the person's hypoglycemia plan, even without symptoms. Confusion, seizure, or inability to swallow is an emergency.
- Systolic pressure at or above 180 mmHg or diastolic pressure at or above 120 mmHg warrants urgent assessment. Associated chest pain, neurological symptoms, or severe breathlessness requires emergency care. Without symptoms, a repeated reading after quiet rest helps confirm persistence. Source: [American Heart Association blood-pressure guidance](https://www.heart.org/en/health-topics/high-blood-pressure/understanding-blood-pressure-readings).
- Fever with expanding administration-site redness, persistent vomiting, jaundice, dark urine, or markedly reduced urine output requires prompt assessment before further exposure.

EXPECTED TIMELINE

Weeks 1 and 2 establish measurement consistency and identify confounders. Weeks 3 through 6 may reveal changes associated with sleep, training, diet, illness, or clinical treatment. These observations cannot establish causality. Week 8 supports reassessment of function and tolerability. It cannot demonstrate lifespan extension, biological-age reversal, or a mitochondrial reset.

EXIT PLAN

End the assessment at week 8 and review changes against the original primary outcome. No validated combined washout interval exists for these compounds. A pharmacokinetic half-life does not establish complete biological recovery. If exposure occurred, the treating clinician or study protocol determines discontinuation and follow-up. Prescribed disease treatment should not stop merely because this educational calendar ends. Continue ordinary measurements for another two to four weeks as an observation period, not a proven washout. When clinically indicated, HbA1c reassessment around three months may better capture sustained glucose change.

COMMON MISTAKES

- Treating an eight-week mouse experiment as a human treatment schedule.
- Equating endogenous MOTS-c responses to exercise with benefits from administered peptide.
- Interpreting accelerated disease-specific approval as proof of healthy-adult longevity benefit.
- Assuming mechanistic overlap proves synergy or determines sequencing.
- Changing multiple exposures while claiming to identify a single cause.
- Calling transient energy, weight fluctuation, or an isolated laboratory change proof of rejuvenation.

TRACKER FIELDS

Blood pressure average mmHg · Resting heart rate average bpm · Morning weight average kg · Waist cm · Sleep average hours · Sleep quality 0 to 10 · Fatigue 0 to 10 · Recovery 0 to 10 · Training minutes and session count · Standardized task duration or distance · Standardized task heart rate and exertion · Glucose value unit and fasting status if indicated · Compound dose route frequency and provenance if exposed · Exposure dates and timing · Adverse event onset severity and resolution · Medication diet caffeine alcohol or illness changes · Laboratory results and dates · Clinician review and next action

REFERENCES

1. Lee C et al. The mitochondrial-derived peptide MOTS-c promotes metabolic homeostasis and reduces obesity and insulin resistance.. *Cell metabolism*, 2015. PMID 25738459 DOI 10.1016/j.cmet.2015.02.009 (Grade C for mouse treatment findings; grade D for cellular mechanisms. Supports the reported animal exposure, without establishing human dosing. Source: [Primary study](https://doi.org/10.1016/j.cmet.2015.02.009).)
2. Reynolds JC et al. MOTS-c is an exercise-induced mitochondrial-encoded regulator of age-dependent physical decline and muscle homeostasis.. *Nature communications*, 2021. PMID 33473109 DOI 10.1038/s41467-020-20790-0 (Grade C for administered MOTS-c performance and healthspan claims: treatment experiments involved mice. Human findings concern endogenous responses to exercise. Neither establishes human treatment efficacy.)
3. Karaa A et al. Efficacy and Safety of Elamipretide in Individuals With Primary Mitochondrial Myopathy: The MMPOWER-3 Randomized Clinical Trial.. *Neurology*, 2023. PMID 37268435 DOI 10.1212/WNL.0000000000207402 (Human randomized trial supporting the reported regimen and negative primary walking-distance and fatigue outcomes in primary mitochondrial myopathy. Does not establish healthy-adult longevity efficacy.)
4. Grant R et al. A Pilot Study Investigating Changes in the Human Plasma and Urine NAD+ Metabolome During a 6 Hour Intravenous Infusion of NAD.. *Frontiers in aging neuroscience*, 2019. PMID 31572171 DOI 10.3389/fnagi.2019.00257 (Grade B for short-term human infusion and metabolite observations in a small randomized pilot. Supports the reported single exposure, without demonstrating longevity or combined-treatment benefit.)

PROTOCOL 09 · SLEEP

Deep Sleep and Nightly Recovery

BEGINNER · 6 WEEKS · CORE: DSIP, EPITALON · SUPPORT: CJC-1295, IPAMORELIN

A six-week framework for measuring sleep, addressing recovery barriers, and evaluating evidence for DSIP, Epitalon, CJC-1295, and ipamorelin. The cited studies do not establish this combination as an effective sleep protocol. Reported doses describe research exposures, not a personal treatment schedule. The six-week duration belongs to the assessment framework, not a validated peptide regimen.

WHO IT IS FOR

Adults who train regularly, experience inconsistent sleep or morning recovery, and want to distinguish documented findings from speculative peptide claims. Beginner describes the educational level. The practical foundation is a sleep diary, consistent routines, and assessment of persistent symptoms.

WHO SHOULD NOT RUN IT

Not suitable as a self-directed peptide cycle, treatment for suspected sleep apnea, or substitute for evaluating persistent insomnia. Pregnancy, breastfeeding, active cancer, pituitary disease, uncontrolled diabetes, and unexplained daytime sleepiness are reasons for medical assessment rather than experimental exposure. These studies do not establish comprehensive contraindications or safety in those populations.

THE LOGIC

The assessment begins with sleep opportunity, symptoms, and potentially reversible disruptions. Pain, illness, breathing problems, under-fueling, excessive training, stimulant exposure, and metabolic disorders can be evaluated together. There is no validated hierarchy requiring inflammation or immunity treatment before sleep assessment. Breathing pauses, dangerous sleepiness, and other concerning symptoms warrant assessment immediately, regardless of the week shown below.

DSIP comes first in the evidence discussion because it has direct human insomnia studies. Their small samples and inconsistent findings do not establish dependable benefit. PMID 3622582 reported improvements in sleep and daytime function, whereas PMID 1299794 found weak effects and little expected therapeutic benefit. Epitalon follows as a circadian hypothesis: altered melatonin secretion in older monkeys does not establish better human sleep. Epitalon and the pineal extract epithalamin are different preparations, and their evidence cannot be exchanged.

CJC-1295 and ipamorelin appear last as background on growth hormone stimulation, which is not an established insomnia treatment. Higher GH or IGF-1 does not demonstrate deeper sleep or improved recovery. The cited studies establish neither a therapeutic combination nor a sequence or six-week escalation for these compounds. Accordingly, the weekly schedule covers assessment, evidence review, and access to established sleep care. It assigns no experimental drug exposure.

COMPONENTS · DOSES AS REPORTED IN THE SOURCES NAMED

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
DSIP	Direct sleep evidence review. Grade B describes the small human studies; Grade C applies to a dependable therapeutic sleep claim because findings are weak and inconsistent.	PMID 1299794 reports DSIP 25 nmol/kg intravenously once each afternoon on three consecutive days. The original molar dose is retained without an independently sourced mass conversion. This research exposure does not establish an effective personal sleep dose. Bes F, 1992, PMID 1299794: 16 patients, weak objective improvements, unchanged subjective sleep quality, and limited expected therapeutic benefit. Schneider-Helmert D, 1987, PMID 3622582: positive findings in 14 patients. These small studies do not establish consistent clinical benefit.	Intravenous in PMID 1299794. These findings do not validate subcutaneous or intranasal substitution. · Once daily for three consecutive study days, PMID 1299794.	Afternoon before the assessed nights, PMID 1299794. The study does not establish a training interval, fasting requirement, or optimal bedtime interval.	No active weeks assigned. The cited exposure lasted three days, not six weeks.	No validated sleep titration is established by the cited studies. The fixed-dose trial does not support escalation for persistent symptoms.
Epitalon	Circadian evidence review. Grade C: animal findings support a biological hypothesis, not established human insomnia treatment. The cited study contains no human sleep outcomes.	PMID 14743609 reports Epitalon 10 mcg per animal intramuscularly once daily for 7 to 10 consecutive days in monkeys. This animal research exposure does not establish a human sleep dose. Goncharova ND, 2003, PMID 14743609: nighttime melatonin increased in older monkeys. Melatonin levels did not change in young monkeys. Neither finding demonstrates improved human sleep.	Intramuscular in the monkey study, PMID 14743609. · Once daily for 7 to 10 consecutive days, PMID 14743609.	The abstract does not establish administration timing relative to food, activity, or sleep. Nighttime hormone sampling is not evidence for bedtime administration.	No active human weeks assigned. The cited animal study does not establish a six-week human sleep regimen.	No validated human sleep titration is established by this study. Animal exposure does not establish a starting dose or escalation sequence.
CJC-1295	Background evidence review only. Grade B for short human endocrine trials; Grade D for proposed sleep benefits based on mechanistic extrapolation.	PMID 16352683 reports CJC-1295 doses including 30 or 60 mcg/kg subcutaneously in single-dose research cohorts. These are endocrine research exposures, not established sleep doses. Teichman SL, 2006, PMID 16352683: sustained GH and IGF-I increases and an estimated half-life of 5.8 to 8.1 days. These short endocrine trials did not establish insomnia efficacy or long-term combination safety.	Subcutaneous long-acting CJC-1295 in PMID 16352683, the preparation associated with the drug affinity complex, or DAC. · Single administration in the cited single-dose cohorts. Separate cohorts received repeated weekly or biweekly administrations, PMID 16352683.	No validated sleep, meal, or training interval is established. Findings cannot be transferred to preparations described as CJC-1295 without DAC.	No active weeks assigned. Inclusion in the evidence review does not establish a reason for exposure when sleep remains poor.	No sleep titration was established. Ascending research cohorts are not an individual escalation plan.

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
Ipamorelin	Background evidence review only. Grade B for short human clinical investigation; Grade D for proposed sleep benefits. The cited trial assessed postoperative gastrointestinal recovery.	PMID 25331030 reports ipamorelin 0.03 mg/kg by intravenous infusion twice daily after bowel surgery, from postoperative day 1 through day 7 or hospital discharge. This was not a sleep trial. Beck DE, 2014, PMID 25331030: randomized proof-of-concept study with no significant difference in the key or secondary efficacy analyses. It cannot establish sleep efficacy or outpatient combination safety.	Intravenous infusion in hospitalized surgical patients, PMID 25331030. · Twice daily for up to seven postoperative days or hospital discharge, PMID 25331030.	Administration followed postoperative care. The study does not validate bedtime use, fasting intervals, or timing around resistance training.	No active weeks assigned. The postoperative study does not support a six-week sleep course.	No validated sleep titration or escalation with CJC-1295 was established by this study.

WEEK BY WEEK

WEEK	ACTIONS	WATCH
1	Record seven nights before changing multiple variables. Establish usual sleep opportunity, work schedule, training load, caffeine timing, alcohol exposure, and pain patterns. Complete baseline measurements. Concerning symptoms warrant assessment without waiting for the diary to finish.	Snoring, witnessed breathing pauses, morning headaches, restless legs, and unintended daytime sleep episodes.
2	Address identified pain or illness with appropriate care. Establish consistent wake timing and review daylight exposure relative to the work schedule. Assess food intake and excessive training fatigue.	Whether sleep improves as underlying disruptions resolve. Record changes rather than attributing improvement to a peptide hypothesis.
3	Review the diary and DSIP evidence. Adjust one modifiable factor, such as late caffeine or disruptive training timing. Discuss cognitive behavioral therapy for insomnia when symptoms persist.	Sleep latency, time awake during the night, daytime function, and anxiety caused by monitoring sleep.
4	Review Epitalon's animal evidence and maintain consistent light and sleep timing appropriate to the work schedule. Persistent breathing or circadian symptoms warrant clinical evaluation.	Schedule drift, increasing time in bed without additional sleep, and misleading wearable sleep-stage changes.
5	Review metabolic history and any clinically indicated results. Assess CJC-1295 and ipamorelin as unproven sleep interventions. No addition or combination is assigned.	If exposure already exists, report swelling, tingling, glucose changes, headaches, and worsening snoring to the treating clinician.
6	Compare weekly averages with baseline. Document sustainable changes and arrange follow-up for unresolved insomnia. Close the assessment without an automatic peptide cycle extension.	Meaningful daytime improvement, persistent impairment, and adverse symptoms requiring continued evaluation.

PRE-CHECKS

- Record available blood-pressure measurements, morning resting heart rate, body weight, and recent weight change when relevant to the clinical assessment. These measurements do not validate experimental exposure.
- Collect a seven-day sleep diary and baseline Insomnia Severity Index. Record sleep opportunity, shift work, naps, snoring, witnessed apnea, and daytime sleepiness.
- Review medications, supplements, caffeine, alcohol, nicotine, sedatives, psychiatric history, restless legs, pain, endocrine disease, and previous peptide exposure.
- Fasting glucose or HbA1c may be relevant with metabolic risk or existing GH-axis exposure. Clinician-directed IGF-1 belongs to endocrine assessment, not routine insomnia screening. CBC, ferritin, TSH, kidney or liver tests should follow symptoms and history.
- CJC-1295 and ipamorelin are prohibited at all times under WADA 2026 section S2.2.4. S0 covers pharmacological substances without governmental approval for human therapeutic use that are not addressed by subsequent sections. Absence of a compound's name is not clearance. Source: [WADA 2026 Prohibited List](https://www.wada-ama.org/sites/default/files/2025-09/2026list_en_final_clean_september_2025.pdf).
- Personal and family history of cancer, including hormone-sensitive and thyroid cancers, reviewed with a clinician before any growth hormone axis component.

MONITORING

- Calculate weekly average sleep latency, wake time after sleep onset, total sleep time, and sleep efficiency. Sleep efficiency equals estimated sleep time divided by time in bed, multiplied by 100.
- Track daytime sleepiness, perceived recovery, training performance, pain, and adverse symptoms. Repeat the Insomnia Severity Index at midpoint and completion.
- Review clinically relevant blood pressure, resting heart rate, and weight trends. Additional glucose or IGF-1 monitoring depends on actual exposure and clinical findings. Normal results do not establish safety.
- Use wearables for consistent trends, with the same device and settings where possible. Their estimated deep-sleep minutes cannot confirm a peptide effect.

STOP RULES

- If experimental exposure is occurring, stop further exposure and seek emergency care for breathing difficulty, facial swelling, chest pain, fainting, or severe headache with visual changes.
- Pause exposure and contact a clinician promptly for new edema, persistent numbness, palpitations, marked blood-pressure change, excessive thirst or urination, or reproducible glucose deterioration.
- Seek prompt assessment for new witnessed apnea, worsening daytime sleepiness, or dangerous drowsiness while driving. Do not drive while sleepy.
- Spreading redness, heat, severe local pain, or fever after parenteral exposure requires urgent assessment.
- Persistent or worsening insomnia should trigger diagnostic reassessment, not escalation or addition of another compound.

EXPECTED TIMELINE

The first two weeks establish baseline patterns and identify practical changes. Some people notice improvement during this period, but the timing and magnitude vary. Assess sustained daytime function across weeks 3 to 6. The cited evidence provides no reliable timeline for peptide-related deeper sleep, circadian restoration, or faster muscular recovery.

EXIT PLAN

End the six-week assessment by retaining useful routines and reviewing unresolved symptoms. No peptide discontinuation procedure is needed if none was used. For existing exposure, a clinician should direct discontinuation and reassessment. The cited studies do not establish a taper or universal follow-up interval for this combination. Long-acting CJC-1295 can complicate interpretation beyond the final administration because endocrine effects persist, PMID 16352683. Continue the diary during follow-up and reassess abnormal symptoms or tests. A brief symptom-free period does not establish that adverse effects have resolved.

COMMON MISTAKES

- Treating the compound name DSIP as proof of deep-sleep enhancement.

- Substituting epithalamin findings for Epitalon evidence or converting monkey doses into human doses.
- Confusing long-acting CJC-1295 with preparations described as without DAC.
- Changing several compounds, training load, and sleep habits simultaneously.
- Interpreting sedation, vivid dreams, elevated IGF-1, or wearable sleep stages as proof of restorative sleep.
- Using normal laboratory results to dismiss persistent symptoms or treating six weeks of assessment as a validated drug cycle.

TRACKER FIELDS

Nights logged · Mean bedtime · Mean wake time · Mean time in bed minutes · Mean sleep latency minutes · Mean wake after sleep onset minutes · Mean total sleep minutes · Mean sleep efficiency percent · Insomnia severity index when due · Daytime sleepiness 0 to 10 · Morning recovery 0 to 10 · Training sessions and load · Latest training finish time · Last caffeine time · Alcohol days · Pain 0 to 10 · Mean blood pressure mmHg if relevant · Mean resting heart rate bpm if relevant · Body weight kg if relevant · Waist cm if relevant · Glucose and IGF1 results if ordered · Actual exposures with dose unit route frequency and dates · Adverse events and actions · Weekly change and follow up decision

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1. Bes F et al. Effects of delta sleep-inducing peptide on sleep of chronic insomniac patients. A double-blind study.. *Neuropsychobiology*, 1992. PMID 1299794 DOI 10.1159/000118919 (Direct human DSIP exposure, intravenous route, afternoon timing, three-day duration, and weak therapeutic findings in 16 patients. Subjective sleep quality did not improve.)
2. Schneider-Helmert D et al. Effects of delta-sleep-inducing peptide on 24-hour sleep-wake behaviour in severe chronic insomnia.. *European neurology*, 1987. PMID 3622582 DOI 10.1159/000116143 (Small positive placebo-controlled, double-blind study in 14 patients. Comparison with PMID 1299794 illustrates inconsistent findings across the cited human DSIP studies.)
3. Goncharova ND et al. [Peptide correction of age-related pineal disturbances in monkeys].. *Advances in gerontology = Uspekhi gerontologii*, 2003. PMID 14743609 (Animal Epitalon exposure and increased nighttime melatonin in older monkeys, without established human sleep benefit. No DOI was present in the esummary response.)
4. Teichman SL et al. Prolonged stimulation of growth hormone (GH) and insulin-like growth factor I secretion by CJC-1295, a long-acting analog of GH-releasing hormone, in healthy adults.. *The Journal of clinical endocrinology and metabolism*, 2006. PMID 16352683 DOI 10.1210/jc.2005-1536 (Human subcutaneous CJC-1295 research exposure, prolonged GH and IGF-I responses, and estimated half-life. The measured endocrine effects do not establish sleep efficacy.)
5. Beck DE et al. Prospective, randomized, controlled, proof-of-concept study of the Ghrelin mimetic ipamorelin for the management of postoperative ileus in bowel resection patients.. *International journal of colorectal disease*, 2014. PMID 25331030 DOI 10.1007/s00384-014-2030-8 (Human intravenous ipamorelin exposure and frequency after bowel surgery. No significant difference occurred in key or secondary efficacy analyses. Sleep efficacy was not established.)

PROTOCOL 10 · NOOTROPICS

Cognitive Focus

BEGINNER · 4 WEEKS · CORE: SEMAX, SELANK

A four-week framework for understanding Semax and Selank, measuring concentration, and evaluating whether anxiety, poor sleep, or inadequate recovery explains the problem. The cited human evidence does not establish this pair as an effective four-week cognitive enhancement protocol. The doses below describe research exposures, not recommended treatment.

WHO IT IS FOR

Adults who train consistently and want to evaluate cognitive claims with objective measurements. Beginner describes the educational level, not established suitability for unsupervised peptide use. The framework also supports a clinician discussion when persistent anxiety or attention problems interfere with work, relationships, or training.

WHO SHOULD NOT RUN IT

Not an appropriate self-directed experiment during pregnancy or breastfeeding, in minors, or with unexplained cognitive decline, seizures, unstable cardiovascular disease, mania, psychosis, or severe insomnia. These are precautionary exclusions, not a verified regulatory contraindication list. Previous hypersensitivity to the compound or formulation requires clinical review. Persistent symptoms suggesting ADHD, depression, sleep apnea, thyroid disease, or anemia require assessment. Athletes subject to testing need an authoritative substance-status determination.

THE LOGIC

Begin with symptom history, functional impairment, sleep, medication effects, caffeine, energy availability, and training recovery. Acute neurological or psychiatric warning signs take priority over tracking. Investigation of inflammatory, endocrine, or other medical causes should follow symptoms and clinical findings. The cited studies do not support a mandatory immune, energy, nervous-system, metabolic, and tissue-repair hierarchy for improving focus.

Selank comes first in the evidence discussion because anxiety may compete with attention. PMID 25176261 examined patients with anxiety-related disorders. Its findings do not establish cognitive enhancement in healthy trainees. Semax comes second because the cited healthy-volunteer research primarily concerns brain-network measurements. This order is an editorial framework, not a clinically validated administration sequence.

Evidence grading follows the claim. Selank's limited anxiety-treatment evidence is grade B. Small human imaging experiments provide grade B evidence of acute physiological effects. Evidence supporting meaningful focus improvement in healthy adults remains grade C, meaning insufficient human evidence for that claim. Semax-related neurotrophin findings in rats are grade C. No cited study establishes additive benefits, an optimal sequence, or a four-week combined regimen.

Accordingly, this framework assigns four weeks to assessment and monitoring. That duration is an organizational choice, not a treatment duration validated by these studies. Existing clinician-directed treatment is recorded with its own indication and plan. A personal log can identify patterns, but cannot establish causation, exclude placebo effects, or determine long-term safety.

COMPONENTS · DOSES AS REPORTED IN THE SOURCES NAMED

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS
Selank	Anxiety-related attention hypothesis. PMID 25176261 compared treatments in 60 patients and reported anxiety improvement and mild nootropic effects. Grade B for the studied anxiety context. Grade C for extrapolation to meaningful focus improvement in healthy adults.	PMID 32342318 reports Selank 0.2 mg intranasally once during a single imaging session. This is a reported research exposure, not a recommended daily dose or four-week regimen. Bibliographic metadata verified through NCBI esummary for PMID 32342318. The exposure was checked against the English full-text methods. [Primary study text] (https://www.researchgate.net/publication/340081770_Functional_connectomic_approach_to_studying_Selank_and_Semax_effects).	Intranasal in PMID 32342318. Equivalence with subcutaneous administration or chemically modified derivatives is not established by this evidence. · Single administration in PMID 32342318. A repeated daily frequency for this focus framework is not established.	No validated timing relative to training, food, or sleep follows from the cited evidence. For tracking, use consistent assessment times. Record their relationship to meals, exercise, bedtime, and any prescribed exposure.	Weeks 1-4: evidence review and tracking. No evidence-based active-week assignment is available for a four-week focus course.

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS
Semax	Exploratory attention-related neurophysiology. PMID 30225715 studied 24 healthy volunteers using resting-state imaging. Grade B for the measured physiological effects. Grade C for meaningful cognitive enhancement in healthy adults. The cited neurotrophin mechanism study used rats.	PMID 32342318 reports Semax 1.2 mg intranasally once during a single imaging session. This research exposure is not a recommended starting dose, daily schedule, or titration target. Bibliographic metadata verified through NCBI esummary for PMID 32342318. The exposure was checked against the English full-text methods. [Primary study text] (https://www.researchgate.net/publication/340081770_Functional_connectomic_approach_to_studying_Selank_and_Semax_effects).	Intranasal in PMID 32342318. Findings cannot be assumed to apply to another route or formulation. · Single administration in PMID 32342318. No validated repeated frequency for four-week cognitive enhancement follows from this study.	The cited evidence establishes no training, fasting, meal, or bedtime advantage. Keep cognitive testing separate from immediate post-exercise fatigue. Use the same relationship to meals and sleep throughout tracking.	Weeks 1-4: evidence review and tracking. No trial-supported active-week assignment is provided.

WEEK BY WEEK

WEEK	ACTIONS	WATCH
1	Establish a seven-day baseline without introducing new cognitive interventions. Record sleep, caffeine, training load, concentration, and anxiety. Practice one brief attention task before retaining scores. Define a practical outcome, such as correctly completed tasks during a fixed work period.	Large day-to-day variability, short sleep, missed meals, excessive training fatigue, or anxiety that predicts worse concentration.
2	Review anxiety and sleep, using Selank's evidence as context for a clinician discussion if symptoms are significant. Maintain consistent work-test conditions. If treatment already exists, document the actual prescription and changes. The research exposure does not supply a treatment schedule.	Distinguish feeling calmer from completing more accurate work. Record drowsiness, agitation, headaches, nasal symptoms, and sleep changes without assuming the compound caused them.
3	Review persistent attention complaints and Semax's evidence limitations. Repeat the same functional measurements. This week's placement does not establish a switch or addition. Document changes in illness, workload, medication, and training that could explain performance.	Faster responses with more mistakes, increased confidence without better output, worsening anxiety, or reduced sleep duration.
4	Compare weekly averages with baseline and review any adverse events. Close the evaluation and, where treatment exists, follow the prescriber's treatment plan. Retain the same measurements during subsequent observation rather than automatically extending the evaluation.	Whether improvement is consistent across comparable days, whether it costs sleep or accuracy, and whether symptoms persist after any prescribed exposure ends.

PRE-CHECKS

- Record seated blood pressure and resting heart rate under consistent conditions if monitoring is clinically appropriate. Document known hypertension, arrhythmias, fainting, and cardiovascular medication.
- Record recent weight change and energy intake as general context. Unintended weight loss or aggressive calorie restriction may explain fatigue and impaired concentration. Waist circumference is optional, not a validated cognitive-response measure.
- Collect seven nights of sleep duration, bedtime, awakenings, and daytime sleepiness. Review snoring, witnessed breathing pauses, shift work, and persistent insomnia.
- Document anxiety, depression, attention symptoms, headaches, seizures, head injury, psychiatric history, allergies, nasal disease, and all medicines or supplements. Interaction data are limited. A clinician should review existing treatment and relevant risks.
- Consider fasting glucose or HbA1c when diabetes risk, symptoms, or overdue screening makes it relevant. HbA1c is not a useful weekly response marker for this framework.
- CBC, ferritin, vitamin B12, TSH, renal function, or liver testing should follow symptoms and history. Routine cortisol, BDNF, cytokine panels, and brain imaging do not validate peptide suitability or response.
- Set one primary functional outcome and its success criterion before reviewing results. Use the same device, task difficulty, testing time, and environment. These checks are general assessment measures, not a validated peptide-screening package.
- WADA status: neither name appears in the 2026 Prohibited List, but absence by name does not establish permission. S2 prohibits listed substances and substances with similar chemical structure or biological effects. S0 applies when its non-approval criteria are met. This review does not resolve either compound's individual classification. Athletes need an authoritative determination for the exact substance and formulation. [WADA 2026 Prohibited List](https://www.wada-ama.org/sites/default/files/2025-09/2026list_en_final_clean_september_2025.pdf).

MONITORING

- Weekly: summarize correctly completed work, error rate, and attention-task performance. Retain raw scores so practice effects and unusually easy sessions remain visible.
- Weekly: compare concentration and anxiety ratings with sleep duration, sleep quality, daytime sleepiness, and caffeine exposure.
- Weekly: summarize resting heart rate and blood pressure if measured, using consistent conditions. Record symptoms alongside abnormal readings. These are general observations, not validated markers of peptide response.
- Weekly: review headaches, nasal irritation, nosebleeds, dizziness, agitation, drowsiness, palpitations, and medication changes. This symptom list is precautionary, not an established adverse-reaction frequency profile.
- Weekly: record training volume, perceived exertion, illness, and major changes in food intake or workload. Routine repeat laboratory testing is unnecessary without a clinical indication.

STOP RULES

- Stop any suspected exposure and seek emergency care for breathing difficulty, facial or tongue swelling, chest pain, fainting, seizure, or sudden severe headache. New weakness or speech disturbance also requires emergency assessment.
- Stop any suspected exposure and obtain urgent assessment for severe agitation, confusion, hallucinations, or suicidal thoughts. Markedly reduced need for sleep with unusual energy or impulsivity also warrants urgent assessment.

- Stop any suspected exposure and contact a clinician for persistent palpitations, repeated resting tachycardia, substantial blood-pressure changes, worsening insomnia, or impaired daytime functioning.
- Stop any suspected exposure and seek assessment for recurrent nosebleeds, persistent nasal pain, significant rash, or recurrent symptoms. Deliberate re-exposure is inappropriate when an allergic reaction is suspected.
- If work accuracy declines, anxiety worsens, or apparent focus comes at the expense of sleep, pause the evaluation and review the cause. Escalation is not justified by these findings.

EXPECTED TIMELINE

Acute imaging effects were assessed within minutes, without establishing an onset time for useful cognitive improvement. PMID 25176261 reported anxiety benefits lasting one week after treatment in patients, which does not predict a healthy person's response. Four weeks can reveal symptom trends and adverse events. An uncontrolled personal log cannot prove efficacy or establish tolerability beyond the observed period.

EXIT PLAN

End the formal evaluation after week 4. Any prescribed treatment continues or ends according to its own clinical plan. The cited studies establish no taper or washout interval for this combined focus concept. A further one to two weeks of observation can help compare symptoms with baseline if clinically appropriate. This is a tracking interval, not a proven pharmacological washout or reason to interrupt prescribed treatment. Reassess sleep, anxiety, functional accuracy, blood pressure if relevant, and adverse events. Persistent or progressive cognitive symptoms warrant evaluation rather than automatic cycling.

COMMON MISTAKES

- Treating altered brain connectivity or rat neurotrophin expression as proof of better human attention.
- Converting a single research administration into a repeated daily regimen.
- Introducing both compounds and several lifestyle changes together, then assigning improvement to one factor.
- Mistaking stimulation, calmness, or test familiarity for better real-world performance.
- Assuming normal laboratory results establish safety, or that symptom tracking excludes uncommon adverse effects.
- Treating the order of the educational discussion as a validated treatment sequence.

TRACKER FIELDS

Week number, week start date, days logged · Correct tasks per fixed session, task error rate, attention task name, attention task score · Concentration rating 0 to 10, anxiety rating 0 to 10, daytime sleepiness rating 0 to 10 · Average sleep hours, bedtime, awakenings per night, sleep quality rating 0 to 10 · Average seated systolic bp mmHg if measured, average seated diastolic bp mmHg if measured, average resting heart rate bpm if measured · Body weight kg if relevant, recent weight change, training sessions, training load notes · Caffeine amount and time, alcohol use, illness, workload changes · Compound if prescribed, actual dose with prescription provenance, route, frequency, exposure dates and times · Timing relative to meals training and sleep, adverse events, medication changes · Stop rule triggered, clinician contact, weekly interpretation, next review date

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2. Lebedeva IS et al. Effects of Semax on the Default Mode Network of the Brain.. *Bulletin of experimental biology and medicine*, 2018. PMID 30225715 DOI 10.1007/s10517-018-4234-3 (Grade B physiological evidence from 24 healthy volunteers examining acute default-mode-network changes. Does not demonstrate improved everyday focus or validate a four-week regimen.)
3. Medvedev VE et al. [A comparison of the anxiolytic effect and tolerability of selank and phenazepam in the treatment of anxiety disorders].. *Zhurnal nevrologii i psikhiatrii imeni S.S. Korsakova*, 2014. PMID 25176261 (Grade B comparative clinical evidence from 60 patients with anxiety-related disorders. Reports anxiolytic and mild nootropic effects, with anxiety benefits persisting one week after treatment. Limited generalizability to healthy adults.)
4. Shadrina M et al. Comparison of the temporary dynamics of NGF and BDNF gene expression in rat hippocampus, frontal cortex, and retina under Semax action.. *Journal of molecular neuroscience : MN*, 2010. PMID 19662538 DOI 10.1007/s12031-009-9270-z (Grade C animal evidence showing region-dependent and time-dependent neurotrophin gene-expression changes. Does not validate human cognitive benefit.)

PROTOCOL 11 · NOOTROPICS

Neuro-Regeneration

ADVANCED · 8 WEEKS · CORE: CEREBROLYSIN, SEMAX · SUPPORT: DIHEXA

An eight-week framework for evaluating neurological symptoms, understanding reported research exposures, and measuring function. Neuro-Regeneration is the protocol title, not a demonstrated outcome. No identified human trial establishes this combination, sequence, or duration for nervous-system regeneration or cognitive enhancement in healthy adults.

WHO IT IS FOR

Adults who train and want an evidence-based discussion with a clinician about persistent cognitive concerns. The framework helps distinguish neurological rehabilitation studies from healthy-adult enhancement claims. Advanced describes the complexity of evaluating the evidence, not eligibility for stronger doses. The eight weeks organize observation and review, not drug administration.

WHO SHOULD NOT RUN IT

Self-directed treatment of stroke, concussion, dementia, unexplained cognitive decline, or psychiatric illness. Cerebrolysin prescribing information lists epilepsy, severe renal impairment, and hypersensitivity to its components as contraindications. Pregnancy, breastfeeding, other seizure history, kidney disease, and active cancer require individual clinical assessment. These agents lack established benefit for elective enhancement in these populations. Sudden neurological symptoms require emergency evaluation. [Cerebrolysin prescribing information](https://cerebrolysin.com/wp-content/uploads/2022/06/CEREBROLYSIN_ProductMonograph_2021_SCREEN.pdf)

THE LOGIC

Assessment begins with possible causes of cognitive symptoms, including infection, inflammatory illness, medication effects, and mood disorders. This does not justify adding immune-modulating peptides. Energy availability, hydration, training fatigue, and possible anemia are relevant next considerations. Sleep assessment includes insomnia and possible sleep apnea. Glucose abnormalities and other metabolic contributors warrant evaluation when indicated. These domains overlap and may require simultaneous clinical care. Their order is an organizing principle, not a validated biological sequence or prerequisite for peptide treatment.

Cerebrolysin comes first in the evidence discussion because it has substantially more clinical investigation in neurological disease. Under this product's scale, multiple human randomized trials qualify as A for the studied disease settings. This classification is not a GRADE certainty rating or evidence of healthy-adult cognitive enhancement. CARS reported improved upper-limb motor recovery alongside rehabilitation. The Cochrane review found no established mortality benefit and a potential increase in nonfatal serious adverse events. These studies address different treatment settings and endpoints.

Semax comes next because its human evidence is more limited. Grade B describes small human studies and short-term physiological findings. The imaging study enrolled 24 volunteers, with 14 receiving Semax and 10 receiving placebo. A separate post-stroke study assessed rehabilitation, circulating BDNF, and function. Neither imaging changes nor higher circulating BDNF demonstrate regenerated neurons, improved intelligence, or durable enhancement. Evidence for healthy-adult enhancement remains C, too weak to support the claim.

Dihexa remains outside the active schedule. Its historical animal work is C at best, with an expression of concern affecting a prominent study. A central HGF/c-Met mechanism paper was subsequently retracted. No human treatment trial was identified in the targeted PubMed search. Human-cell experiments do not establish human therapeutic efficacy or dosing. No identified controlled evidence supports synergy among these compounds, and simultaneous exposure would complicate attribution of benefits and adverse effects.

COMPONENTS · DOSES AS REPORTED IN THE SOURCES NAMED

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
Cerebrolysin	Core evidence-review compound. A porcine brain-derived mixture of peptides and amino acids studied in neurological disease. Post-stroke recovery findings cannot be transferred directly to healthy trainees.	CARS, PMID 26564102, reported 30 mL by intravenous infusion once daily for 21 days, beginning 24 to 72 hours after stroke onset. Participants also received rehabilitation. This is a disease-specific research exposure, not a recommended nootropic dose. Dose, route, frequency, and duration were checked in the full CARS report, PMID 26564102. PMID 37818733 informs the broader acute-stroke benefit and harm assessment. [CARS trial](https://pmc.ncbi.nlm.nih.gov/articles/PMC4689177/)	Intravenous infusion in CARS, PMID 26564102. This research involved clinical administration. · Once daily by intravenous infusion in CARS, PMID 26564102. No validated healthy-adult maintenance frequency.	CARS anchored treatment to stroke onset. It did not establish workout, meal, bedtime, or fasted-training timing for cognitive enhancement.	CARS, PMID 26564102, used 21 consecutive treatment days. No active enhancement weeks are assigned here; any prescribed course follows its clinical indication.	CARS used a fixed regimen. No evidence-based escalation, loading phase, or symptom-driven titration exists for this eight-week enhancement framework.
Semax	Core evidence-review compound with limited human neurological and imaging data. Short-term network effects are not equivalent to established cognitive enhancement.	PMID 30225715 studied a single intranasal administration. The FDA Semax review reports that study's exposure as 1.2 mg intranasally once. This is a reported research exposure, not an approved FDA dosing label or a repeated eight-week regimen. PMID 30225715 establishes the study identity and intranasal imaging design. FDA's review supplies the numerical exposure and states that adverse events were not discussed for this study. [FDA Semax review](https://www.fda.gov/media/193348/download)	Intranasal in the cited imaging study. Findings do not establish equivalence for injectable or chemically modified versions. · One intranasal administration in the imaging experiment, PMID 30225715. A daily enhancement schedule cannot be inferred.	Imaging occurred before and shortly after administration. Training, food, and sleep timing were not validated as determinants of benefit.	No active enhancement weeks assigned. The cited single-exposure experiment cannot support continuous use or a Cerebrolysin-to-Semax transition.	No validated titration steps for this goal. Lack of a noticeable effect is not evidence supporting escalation.
Dihexa	Evidence appraisal only. No established human therapeutic role or demonstrated human regeneration benefit. The retrieved evidence does not justify optional therapeutic support.	No validated human dose, route, frequency, or titration was identified. The retrieved evidence does not support a numerical human regimen. Animal exposures cannot establish a human treatment dose. PMID 23055539 describes preclinical work and has a linked expression of concern in its PubMed record. PMID 40312093 documents retraction of a separate central HGF/c-Met mechanism paper. These records support publication-status limitations, not human treatment.	No established human route. Oral activity reported in animals does not validate oral, topical, or injectable human administration. · Not established in human treatment trials identified by the targeted search.	Human relationships to training, meals, and sleep are unknown.	None. Excluded throughout weeks 1 to 8.	None established. The evidence does not support a trial-and-escalate sequence.

WEEK BY WEEK

WEEK	ACTIONS	WATCH
1	Record seven days of baseline sleep, symptoms, blood pressure, resting pulse, and training. Define one functional target, such as completing a normal work block with fewer attention lapses.	Abrupt onset, progressive decline, focal symptoms, or impairment affecting driving and everyday safety. These findings override the review schedule.
2	Review history, medications, sleep, and relevant laboratory results with a clinician. Identify reversible contributors. Keep caffeine, training load, and assessment timing consistent.	Sleep apnea features, under-fueling, excessive fatigue, mood symptoms, and medication-related sedation.

WEEK	ACTIONS	WATCH
3	Review Cerebrolysin's disease-specific evidence and whether an actual clinical indication exists. Record the decision and its rationale. There is no automatic compound start.	Confusing post-stroke motor improvement with enhancement of memory in healthy adults. Check contraindications if clinical treatment is being considered.
4	Conduct the midpoint review and repeat the selected functional assessment under baseline conditions. If treatment was independently prescribed, document actual exposure and clinician instructions.	Headache, dizziness, agitation, sleep deterioration, allergic symptoms, or reduced exercise tolerance. Concurrent changes limit interpretation.
5	Review Semax evidence, including the distinction between imaging endpoints and meaningful function. Assess progress from sleep and other foundational changes before attributing benefit to treatment.	Practice effects, expectancy, increased caffeine, and simultaneous lifestyle changes.
6	Arrange an interim clinical review if symptoms persist or treatment is underway. Compare function, adverse effects, and baseline variability. Dihexa remains excluded.	Subjective stimulation without functional benefit, escalating exposure, or accumulating adverse effects.
7	Confirm the endpoint of any prescribed course with its prescriber. Continue stable habits and observation. The framework does not justify extending exposure to fill eight weeks.	Worsening sleep, persistent symptoms, or pressure to add compounds when improvement is absent.
8	Repeat baseline measurements and review the functional target. Record whether further diagnostic work, rehabilitation, or follow-up is needed.	Persistent decline, adverse effects after the last exposure, and apparent benefits that disappear when testing conditions are matched.

PRE-CHECKS

- Record seated home blood pressure and resting heart rate on several days, using consistent conditions. Record body weight and waist circumference for metabolic context.
- Collect a seven-day sleep diary, bedtime and wake time, awakenings, daytime sleepiness, snoring, caffeine, alcohol, training load, and estimated energy intake.
- Document symptom onset, duration, severity, head injuries, migraines, seizures, psychiatric history, kidney disease, allergies, cancer history, and all medications and supplements.
- Review Cerebrolysin contraindications and relevant local prescribing information if clinical treatment is being considered. Specialist assessment does not remove a labeled contraindication.
- Discuss creatinine and eGFR when clinical treatment is being considered. CBC, electrolytes, liver tests, TSH, vitamin B12, fasting glucose, or HbA1c should follow symptoms, history, and metabolic risk.
- Choose one repeatable cognitive task and one everyday functional measure. Persistent or progressive impairment warrants a clinician-led cognitive and neurological assessment.
- For tested athletes, experimental Dihexa is prohibited at all times under WADA's rules for non-approved pharmacological substances. This applies the S0 category rule; Dihexa is not individually named. Cerebrolysin, Semax, and administration methods require status confirmation with the responsible anti-doping authority. Absence of a named listing does not establish permission. [2026 WADA Prohibited List](https://www.wada-ama.org/sites/default/files/2025-09/2026list_en_final_clean_september_2025.pdf)

MONITORING

- Summarize weekly blood pressure, resting pulse, sleep duration, sleep quality, body weight, and training tolerance against personal baseline.
- Repeat the functional task at the same time of day with similar sleep, caffeine, and meal conditions. Record errors as well as speed.
- Log headaches, dizziness, agitation, anxiety, mood elevation, nasal symptoms, and other adverse events with onset and duration.
- Review any actual exposure and concurrent medication changes weekly. Repeat laboratory testing according to clinical indication; normal results cannot establish experimental-drug safety.
- Do not use circulating BDNF, consumer brain scores, or subjective stimulation as proof of regeneration. Home tracking cannot establish treatment causality or replace neurological assessment.

STOP RULES

- Stop any experimental exposure and seek emergency care for new facial droop, unilateral weakness, speech difficulty, sudden severe headache, seizure, unconsciousness, or acute confusion.
- Seek emergency care for breathing difficulty, tongue or throat swelling, chest pain, or fainting.
- Pause further exposure and obtain prompt clinical assessment for marked agitation, severe insomnia, unusually elevated mood, or hallucinations. Suicidal intent or inability to remain safe requires emergency care.
- Obtain same-day assessment for persistent vomiting, significantly reduced urine output, severe dizziness, or a substantial sustained change in blood pressure or pulse.
- For clinician-administered treatment, fever or increasing redness, warmth, swelling, or pain at an administration site requires prompt review.
- Stop pursuing enhancement and reassess the diagnosis when everyday function worsens, adverse effects outweigh any benefit, or exposure escalates without measurable improvement.

EXPECTED TIMELINE

No reliable eight-week regeneration timeline exists. The Semax imaging study measured immediate physiological changes, not lasting functional benefit. CARS assessed its primary recovery outcome at 90 days. Improvements after correcting sleep or under-fueling may occur during this framework, but cannot establish a peptide effect. Progressive symptoms warrant earlier assessment, not completion of the schedule.

EXIT PLAN

End the review at week 8 without an automatic repeat cycle. Any prescribed course ends according to the treating clinician's plan. No validated combined taper or washout interval exists for these agents. Short plasma persistence would not establish the end of biological effects. Arrange follow-up after the last clinical exposure and reassess symptoms, sleep, functional performance, and adverse events. Record time since last exposure without labeling it a proven washout. Persistent impairment calls for diagnostic reassessment rather than another compound.

COMMON MISTAKES

- Treating evidence grade A as proof of benefit for every goal or as a high-certainty GRADE assessment.
- Copying stroke-treatment doses into a healthy-adult enhancement plan.
- Interpreting increased BDNF or altered fMRI activity as regenerated neurons.
- Stacking agents and losing the ability to attribute effects.
- Citing Dihexa research without distinguishing an expression of concern from a retracted publication.
- Mistaking repeated-test improvement or better sleep for drug efficacy.

TRACKER FIELDS

Primary functional target · Cognitive task name · Task score and errors · Everyday function result · Assessment time and conditions · Mean sleep hours · Sleep quality 0 to 10 · Daytime sleepiness 0 to 10 · Mean seated blood pressure · Mean resting heart rate · Body weight kg · Waist cm · Training sessions and tolerance · Caffeine and alcohol · Medication or supplement changes · Compound and actual exposure if prescribed · Exposure route frequency and dates · Prescriber and indication · Adverse event onset duration severity · Laboratory results if obtained · Clinician review and decision · Days since last exposure

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PROTOCOL 12 · LONGEVITY

Longevity Maintenance

INTERMEDIATE · 10 WEEKS · CORE: EPITALON, THYMALIN · SUPPORT: NAD+, THYMOSIN ALPHA-1

A 10-week framework for evaluating longevity claims, establishing measurable baselines and reviewing documented exposures. The verified references do not validate this four-compound sequence or establish that it extends healthy lifespan in adults who train. The intended practical outcome is better judgment and a usable health record.

WHO IT IS FOR

Adults with established training habits who want to understand the evidence behind Epitalon, Thymalin, NAD+ and Thymosin Alpha-1. This educational framework supports discussion with a clinician. Its calendar organizes assessment and follow-up. Reported drug exposures describe the literature and are not instructions for self-administration.

WHO SHOULD NOT RUN IT

Pregnant or breastfeeding people, minors, or anyone seeking experimental treatment for unexplained fatigue, recurrent infections or suspected endocrine disease without evaluation. Active cancer, transplantation, autoimmune disease, immunosuppressive treatment, serious organ disease or unresolved acute illness require specialist assessment. These exclusions concern experimental exposure, not access to the educational material. A known allergy to a compound or formulation component precludes exposure to that preparation.

THE LOGIC

The assessment begins with illness history, immune concerns and recovery because untreated disease and inadequate recovery can dominate fatigue and performance. Thymalin belongs in this first evidence review. Thymosin Alpha-1 addresses a related immune domain, but overlapping mechanisms do not establish additive benefit or justify combining them.

Energy comes next, represented by a review of NAD+. NAD+ is a coenzyme, not a peptide. Its biochemical importance does not establish that intravenous administration improves healthspan. Persistent fatigue first warrants attention to sleep, nutrition, medications and clinically indicated investigation.

Nervous system function and sleep follow. Epitalon is often placed here through pineal biology and telomerase hypotheses. However, the cited Epitalon experiment involved cultured human cells. The older human longevity report used Epithalamin, a different pineal extract. Its outcomes cannot establish an Epitalon dose, bedtime schedule or clinical benefit.

Metabolism is then assessed through blood pressure, waist, glucose and lipids. Tissue maintenance follows through recoverable training and adequate nutrition. No additional anabolic compound is justified by this framework. This order organizes assessment and does not establish a biological prerequisite or pharmacological sequence. The component evidence does not establish the efficacy or safety of a combined maintenance cycle. Evidence grades below apply to the stated outcome, not every possible use of a compound.

COMPONENTS · DOSES AS REPORTED IN THE SOURCES NAMED

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
Thymalin	Primary immune-domain review topic. Historical controlled human research exists. Its reporting limitations and different study populations leave the longevity claim at grade C for adults who train.	PMID 14523363 reports Thymalin 10 mg intramuscularly once daily for 10 days in the St. Petersburg cohort. This historical study exposure is not a maintenance recommendation. PMID 14523363, methods checked in a reproduced full text. The paper describes multiple cohorts with different schedules. Thymalin is a thymic peptide preparation and is not interchangeable with the defined peptide Thymosin Alpha-1.	Intramuscular in the cited cohort. Findings do not establish equivalence with subcutaneous administration or differently characterized preparations. · Once daily during the cited short course. The report also describes repeat courses over subsequent years, not continuous weekly maintenance.	No validated relationship to training, food or bedtime was established. Morning or evening superiority cannot be inferred.	Evidence review in weeks 1 and 2. No administration weeks are assigned because the historical course does not validate this 10-week sequence.	The cited cohort used a fixed exposure. This study does not establish upward titration or symptom-driven adjustment for longevity.
NAD+	Optional energy-domain review topic. Grade B for the small human infusion and metabolite study. Grade D for mechanistic extrapolation to lifespan extension, which the study did not measure.	PMID 31572171 reports NAD+ 750 mg intravenously once, infused over 6 hours on a single study day. This was a metabolic pilot exposure, not a validated longevity regimen. PMID 31572171, publisher full-text methods checked. Eight participants received NAD+ and three received saline. Metabolite changes describe handling of the administered compound, not rejuvenation.	Intravenous infusion under study supervision. The findings do not establish subcutaneous, oral or intranasal equivalence. · One study-day infusion. Weekly or repeated maintenance sessions cannot be derived from this experiment.	The study does not establish optimal timing relative to resistance training, meals or sleep. Infusion-related sensations are not evidence of improved cellular function.	Optional evidence review in weeks 3 and 4. No recurring exposure is scheduled.	No longevity titration was established. The studied infusion duration is a method detail, not a template for self-directed rate adjustment.
Epitalon	Primary review topic for telomerase and pineal hypotheses. Grade D for the cited cultured-cell findings. Those findings do not demonstrate human longevity or sleep benefits.	Epitalon 10 mg subcutaneously once daily for 10 days is commonly cited in non-clinical use; not validated in trials. This describes an unvalidated convention, not a recommended exposure. The non-clinical convention was not verified as a study exposure. PMID 12937682 supports a laboratory mechanism only. Epithalamin exposure in PMID 14523363 must not be relabeled as Epitalon exposure.	Subcutaneous in the non-clinical convention. PMID 12937682 studied cultured cells and establishes no human administration route. · Daily in the non-clinical convention. No clinically validated longevity frequency is established by the cited evidence.	Bedtime use is a mechanistic extrapolation. No verified human study here establishes superiority before sleep, after training or away from meals.	Evidence review in weeks 5 and 6. No active administration weeks are assigned.	No starting dose, escalation sequence or maximum tolerated longevity dose is established by the cited evidence. Telomerase findings cannot supply these parameters.
Thymosin Alpha-1	Optional immune-domain review topic alongside Thymalin. Grade B for the cited small hepatitis B trial. Grade D for mechanistic extrapolation to healthy lifespan extension, which the trial did not measure.	PMID 17075991 reports Thymosin Alpha-1 1.6 mg subcutaneously twice weekly for 6 months in chronic hepatitis B. This disease-specific exposure is not a longevity recommendation. PMID 17075991, publisher full text checked. The trial randomized 62 patients between active treatments and included 30 historical untreated controls. Disease-specific outcomes cannot establish general immune enhancement. Transplantation or deliberate immunosuppression requires specialist review before any immune-modulating treatment.	Subcutaneous in the cited trial. · Twice weekly in the cited trial. Its duration cannot be shortened to this calendar while assuming equivalent outcomes.	No longevity-specific relationship to food, exercise or bedtime was established. Training recovery is not a validated indication from this study.	Optional review in weeks 1 and 2. No routine add-on weeks are assigned. A medical indication requires its own treatment plan.	The study used a fixed regimen, not progressive escalation. It establishes neither longevity titration nor an evidence-based combination schedule with Thymalin.

WEEK BY WEEK

WEEK	ACTIONS	WATCH
1	Collect seven days of baseline observations. Review illnesses, medications and immune history. Keep training and nutrition broadly consistent.	Fever, unexplained weight loss, persistent fatigue or recurrent infections requiring evaluation.
2	Review Thymalin and Thymosin Alpha-1 evidence with a clinician. Identify whether an actual immune disorder needs diagnosis.	Confusing normal training fatigue with immune deficiency or assuming two immune agents are complementary.
3	Review energy intake, alcohol, caffeine, training load and fatigue patterns before assessing NAD+ claims.	Exertional breathlessness, palpitations, excessive daytime sleepiness or declining exercise tolerance.
4	Compare energy and recovery with baseline. Record whether any medically supervised exposure occurred and its exact documentation.	Attributing ordinary fluctuations or infusion sensations to mitochondrial improvement.
5	Review Epitalon evidence and its distinction from Epithalamin. Establish a consistent sleep opportunity and waking time.	Insomnia, witnessed apneas, loud snoring or persistent daytime impairment.
6	Compare sleep duration, awakenings and daytime function across two weeks. Assess unresolved symptoms clinically.	Overinterpreting wearable sleep stages or treating subjective improvement as proof of telomere change.
7	Review blood pressure, weight and waist trends. Assess available glucose and lipid results in their cardiovascular context.	Persistent hypertension, rising glucose or unintended weight change.
8	Review tissue recovery through a repeatable submaximal exercise measure. Adjust excessive workload without adding compounds.	Persistent tendon pain, falling performance or soreness that fails to resolve.
9	Consolidate the record. Repeat abnormal or clinically indicated tests using comparable collection conditions.	Abnormalities obscured by illness, dehydration or unusually strenuous recent training.
10	Compare outcomes with baseline and document the exit decision. Arrange follow-up for unresolved symptoms or adverse events.	Automatic repeat cycles, escalating exposure after no benefit or calling short-term changes lifespan extension.

PRE-CHECKS

- Record seated blood pressure with an appropriate cuff, resting heart rate, morning body weight, waist circumference and seven days of sleep and fatigue observations.
- Review fasting glucose or HbA1c and a lipid panel when due or clinically relevant. CBC with differential, creatinine/eGFR and liver chemistry depend on symptoms, history or contemplated medical treatment.
- Document cancer, autoimmune disease, transplantation, allergies, kidney or liver disease, pregnancy possibility, prescription medicines and supplements. Persistent fatigue may warrant targeted thyroid, anemia or sleep-apnea assessment.
- Routine cytokine panels, telomere tests and commercial biological-age scores do not establish suitability or prove that this framework works. Normal baseline tests do not resolve experimental-treatment risks.
- WADA S0 prohibits pharmacological substances lacking approval by any governmental health authority for human therapeutic use, unless addressed elsewhere in the List. This prohibition applies at all times. Absence of a named compound is not clearance. Exact substance and preparation status requires verification. Source: 2026 WADA Prohibited List, section S0.
- WADA M2.2 prohibits intravenous infusions or injections totaling more than 100 mL per 12 hours, subject to specified exceptions. Those exceptions concern legitimate hospital treatment, surgery or clinical diagnostic investigations. Other circumstances require applicable therapeutic use exemption review. Ingredient status and administration-method status are separate. Source: 2026 WADA Prohibited List, section M2.2.

MONITORING

- Weekly: compare average resting heart rate, standardized blood pressure readings, average morning weight and waist circumference with baseline.
- Weekly: summarize sleep duration, awakenings, fatigue, infection symptoms, training sessions and a consistent performance measure.
- Record each adverse event, onset, severity, duration and clinician response. If exposure occurred under medical care, record the compound, formulation, dose, route, frequency and provenance.
- Repeat laboratory tests according to baseline findings and clinical judgment. Normal results do not establish long-term safety. Weekly broad laboratory panels are not routinely informative.

STOP RULES

- Stop any ongoing experimental exposure and seek emergency care for breathing difficulty, facial or tongue swelling, fainting, chest pain or new neurological deficits.
- Stop experimental exposure and obtain prompt assessment for fever with spreading redness, warmth, drainage or increasing pain at an administration site.
- Seek prompt assessment for jaundice, dark urine, markedly reduced urination, persistent vomiting or a new widespread rash.
- Pause experimental exposure for persistent palpitations, substantial sleep deterioration, new joint swelling or other possible autoimmune symptoms pending clinical review.
- Repeated systolic pressure of at least 180 mmHg or diastolic pressure of at least 120 mmHg requires urgent clinical contact. Associated chest pain, breathlessness, visual changes or neurological symptoms require emergency care without waiting for repeat measurements.
- Unexplained cytopenias, renal deterioration or significant liver-test abnormalities require clinician-directed review before further experimental exposure.

EXPECTED TIMELINE

Weeks 1 through 3 establish variability and identify treatable problems. Sleep, fatigue and recovery may change over subsequent weeks through ordinary behavioral adjustments. Ten weeks cannot establish lifespan extension, reduced cancer risk or meaningful rejuvenation. Neither a favorable laboratory result nor absence of symptoms validates the compounds. Changes during observation cannot establish which intervention caused them.

EXIT PLAN

At week 10, end the assessment block and document whether any objective change, adverse event or unresolved issue exists. The verified references establish no combined washout interval or longevity taper for these compounds. Any actual medical treatment follows its prescriber's plan. Continue observation for another two to four weeks if useful. This follow-up period does not demonstrate clearance or a biological reset. Reassess abnormal findings and avoid assuming that a completed calendar justifies repetition.

COMMON MISTAKES

- Substituting Epitalon for Epithalamin when interpreting human studies.
- Treating historical doses or non-clinical conventions as personalized prescriptions.
- Starting several interventions together and assigning causality afterward.
- Confusing metabolic, telomerase or immune-marker changes with longer healthy life.

- Using a certificate of analysis as proof of clinical efficacy, sterility or long-term safety.
- Interpreting an evidence-review calendar as a validated administration sequence.

TRACKER FIELDS

Blood pressure average mmHg · Resting heart rate average bpm · Morning weight average kg · Waist cm · Sleep average hours · Night awakenings average · Fatigue 0 to 10 · Infection symptoms and days · Training sessions and load · Standardized performance measure · Medication and supplement changes · Compound id and formulation if exposed · Reported dose route frequency and source if exposed · Exposure dates and times if applicable · Adverse event onset severity duration · Laboratory results units and dates · Clinician review and decision

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1. Khavinson VKh et al. Peptides of pineal gland and thymus prolong human life.. *Neuro endocrinology letters*, 2003. PMID 14523363 (Historical human Thymalin exposure and reported long-term outcomes in older populations. The pineal preparation was Epithalamin, not Epitalon. The paper does not validate the four-compound sequence or establish longevity benefit in adults who train.)
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3. Khavinson VKh et al. Epithalon peptide induces telomerase activity and telomere elongation in human somatic cells.. *Bulletin of experimental biology and medicine*, 2003. PMID 12937682 DOI 10.1023/a:1025493705728 (Grade D laboratory evidence involving cultured human somatic cells. The study does not establish clinical dosing, sleep improvement or human lifespan extension.)
4. You J et al. Efficacy of thymosin alpha-1 and interferon alpha in treatment of chronic viral hepatitis B: a randomized controlled study.. *World journal of gastroenterology*, 2006. PMID 17075991 DOI 10.3748/wjg.v12.i41.6715 (Disease-specific Thymosin Alpha-1 exposure and outcomes in chronic hepatitis B. Grade B for this small trial with randomized active treatments and historical untreated controls. It does not establish healthy-adult longevity or combination benefit with Thymalin.)

PROTOCOL 13 · LIBIDO

Libido and Sexual Response

BEGINNER · 4 WEEKS · CORE: PT-141, KISSPEPTIN-10 · SUPPORT: OXYTOCIN

A four-week framework for distinguishing low desire from impaired arousal, identifying reversible contributors, and understanding documented peptide interventions. This educational assessment framework is not a validated three-compound treatment regimen. Beginner refers to the educational level, not suitability for self-treatment. Success means clearer decisions and measurable symptom assessment, without a promise of improved sexual performance.

WHO IT IS FOR

Adults who train and experience persistent, personally distressing changes in desire or sexual response. The framework supports discussion with a clinician. Bremelanotide evidence is strongest for premenopausal women with acquired, generalized hypoactive sexual desire disorder, abbreviated HSDD. Acquired means developing after previously normal desire; generalized means occurring across situations, stimulation types, or partners. Its labeled indication excludes symptoms caused by medical or psychiatric conditions, relationship problems, or medication or substance effects. This evidence does not establish effectiveness for every adult, men, or postmenopausal women.

WHO SHOULD NOT RUN IT

People seeking automatic enhancement despite normal sexual function, or treatment driven only by a partner's expectations. Pregnancy, breastfeeding, unexplained genital pain, unstable psychiatric illness, and suspected endocrine disease require individualized assessment. Bremelanotide is contraindicated with uncontrolled hypertension or known cardiovascular disease. Its label also advises against use in people at high cardiovascular risk. Experimental kisspeptin and oxytocin regimens are not established beginner treatments.

THE LOGIC

Assessment begins with symptom definition and potentially reversible contributors. Active illness, pain, medication effects, relationship context, mood, sleep, energy availability, and excessive training load deserve consideration. Diabetes and endocrine disorders warrant investigation when symptoms or risk factors support it. There is no validated sequence requiring inflammation treatment before nervous-system, metabolic, or sexual-health assessment. Routine inflammatory panels are unnecessary without clinical indications. Tissue-repair and anabolic peptides have no established role in this framework. Adequate recovery and treatment of underlying disease may address contributors that pharmacological stimulation leaves unresolved.

Among these compounds, PT-141, or bremelanotide, comes first in evidence review because randomized trials demonstrated clinical benefit in its defined HSDD population. It is a melanocortin receptor agonist; its precise therapeutic mechanism in HSDD remains incompletely understood. Grade A applies to the approved indication, supported by two randomized phase 3 trials, PMID 31599840. Improvements concerned desire and related distress. This does not establish a universal aphrodisiac effect or guarantee an individual response.

Kisspeptin-10 comes second as reproductive-axis research. Small human experiments support LH stimulation consistent with activation of the GnRH pathway, grade B for endocrine effects, PMID 21632807. Libido benefit specifically from kisspeptin-10 remains grade C under this product's scale because supporting human evidence is insufficient. The cited sexual-processing trials used kisspeptin-54, a different molecular form, PMIDs 36735255 and 36287566. These provide grade B evidence for acute laboratory outcomes. They cannot establish durable symptom improvement or a repeated subcutaneous kisspeptin-10 protocol.

Oxytocin is included only as an evidence discussion. A small randomized trial found no statistically significant superiority over placebo, PMID 26151620. This is grade B human evidence with a negative efficacy result, not proof that all possible regimens are ineffective. Neither that study nor the other cited trials validates sequencing or combining all three compounds.

COMPONENTS · DOSES AS REPORTED IN THE SOURCES NAMED

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
PT-141	Primary evidence discussion for patients meeting the labeled HSDD criteria. Melanocortin receptor agonist with grade A evidence specific to that indication.	The Vyleesi prescribing information reports bremelanotide 1.75 mg subcutaneously as needed, at least 45 minutes before anticipated sexual activity. The same label permits no more than one administration per 24 hours and does not recommend more than eight administrations monthly. Dose, indication, and restrictions: Vyleesi prescribing information, sections 1, 2, 4, 5, 7, and 8, DailyMed. https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=f1d0c1b5-2f39-4bad-a6a4-0066e3ad5dcf. Randomized efficacy evidence: PMID 31599840.	Subcutaneous in the approved formulation. Other preparations or routes cannot be assumed equivalent. · Event-based under the Vyleesi label. The label does not describe a daily cycle or a weekly exposure target.	The label states that the optimal administration window and duration of efficacy are incompletely characterized. No validated training or bedtime window is established. Recording meals, exercise, and sleep may help interpret symptoms and tolerability.	Weeks 2 to 4 are review and observation windows only when treatment has been independently prescribed after assessment.	The label provides a fixed dose, not a beginner escalation ladder. Intolerance warrants prescriber review.
Kisspeptin-10	Research topic, not an established libido treatment. Hormone release and subjective desire are different outcomes; the molecular form matters.	PMID 21632807 reports kisspeptin-10 at 0.01 to 3.0 mcg/kg intravenously as single bolus research exposures in healthy men. These were endocrine experiments, not libido prescriptions or a validated repeated-treatment schedule. Kisspeptin-10 bolus dosing and endocrine outcomes: PMID 21632807. Acute sexual-response studies used kisspeptin-54, PMIDs 36735255 and 36287566. Their findings do not validate substitution between forms.	Intravenous in the cited experiment. That study does not establish an equivalent subcutaneous libido regimen. · Single bolus research exposures in the reported dose-finding experiment. Separate infusion experiments also assessed endocrine responses. No validated four-week frequency for sexual symptoms follows from these findings.	The verified abstract establishes no useful relationship to training, meals, sexual activity, or sleep. Research scheduling cannot be assumed to improve clinical outcomes.	Weeks 1 to 4: evidence review only. No administration phase is assigned outside an authorized clinical study.	No validated libido titration exists. The cited dose-response experiment found that greater exposure did not consistently produce a greater LH response.
Oxytocin	Optional research discussion. The relevant small trial provides grade B evidence without demonstrated superiority over placebo.	PMID 26151620 reports oxytocin 32 IU intranasally per sexual-intercourse occasion, within 50 minutes beforehand, during eight-week treatment periods. This describes the trial exposure, not a recommended regimen. PMID 26151620: 30 women, randomized crossover design, eight-week treatment periods separated by a two-week washout, without a statistically significant treatment advantage.	Intranasal in the sexual-function trial. Obstetric routes and indications are not interchangeable. · Event-linked in the trial. The abstract does not establish a universal weekly frequency or a validated maximum exposure.	The study linked exposure to intercourse. No established training, food, or sleep timing improves sexual outcomes.	Week 3: evidence review only. No routine addition is assigned during this four-week framework.	No evidence-supported libido escalation sequence follows from this trial. Lack of benefit does not justify increasing exposure.

WEEK BY WEEK

WEEK	ACTIONS	WATCH
1	Collect seven days of baseline observations. Define the main problem as desire, arousal, erection, lubrication, orgasm, pain, or distress. Review medications and recovery with a clinician. Select one primary outcome before evaluating an intervention. Complete the baseline questionnaire using its full specified recall period.	Sleep loss, aggressive dieting, excessive training, relationship pressure, depressive symptoms, and whether the problem occurs across situations.
2	Review baseline findings and any indicated tests. Address reversible contributors with appropriate clinical support. If bremelanotide was independently prescribed, document the existing prescription and each exposure. Otherwise, the framework continues as assessment and tracking.	Tolerability, blood pressure, headache, flushing, nausea, and whether perceived improvement concerns desire, distress, or physical arousal.
3	Compare symptom patterns with baseline while keeping major lifestyle variables consistent where practical. Review the kisspeptin molecular-form distinction and oxytocin's negative trial. Persistent symptoms warrant diagnostic review rather than automatic additions.	Changes in distress, sexual comfort, sleep, and recovery. Separate medication-associated observations from changes in relationship context or opportunity.
4	Repeat the baseline questionnaire using its specified recall period. Review the primary outcome, adverse effects, and treatment burden. Document a clinician-agreed continuation, discontinuation, or referral decision. Close the tracking period without automatic cycling.	Meaningful personal benefit, unresolved symptoms, and adverse effects that persist beyond an exposure. Questionnaire changes alone do not establish causality.

PRE-CHECKS

- Record seated blood pressure and resting heart rate on several rested days. Document sleep duration, training volume, dietary restriction, and recent weight change. Weight and waist measurements are optional when metabolic assessment makes them relevant.
- Document onset, duration, distress, situational versus generalized symptoms, pain, menstrual or menopausal status, erectile symptoms, and relevant medical or surgical history.
- Review antidepressants, antihypertensives, opioids, hormonal medicines, alcohol, and recreational substances. Medication changes belong with the prescriber. The Vyleesi label advises avoiding concomitant oral naltrexone for alcohol or opioid addiction because reduced absorption may undermine treatment.
- Bremelanotide can also alter absorption of other oral medicines through delayed gastric emptying. The prescriber should review drugs requiring reliable threshold concentrations or rapid onset, plus significant kidney or liver impairment.
- Consider fasting glucose or HbA1c when metabolic risk or erectile symptoms justify screening. Consider lipids according to cardiovascular risk. Four weeks is generally too short for HbA1c to evaluate this framework.
- Endocrine testing is selective: morning testosterone in symptomatic men, repeated on another morning if low; LH, FSH, prolactin, or TSH when findings justify them. Menstrual phase and hormone therapy affect interpretation.
- Assess pregnancy possibility and reproductive plans. The Vyleesi label specifies effective contraception during treatment and discontinuation if pregnancy is suspected. Breastfeeding requires individualized review. Screen for depression, sleep apnea, pelvic pain, and low energy availability when symptoms suggest them.
- Sport status: the 2026 WADA Prohibited List prohibits kisspeptin and its agonist analogues at all times in males under S2.2.1. Source: WADA 2026 Prohibited List. https://www.wada-ama.org/sites/default/files/2025-09/2026list_en_final_clean_september_2025.pdf.

MONITORING

- Weekly: average desire and distress scores, each 0 to 10, plus arousal, orgasm satisfaction, pain, sleep, fatigue, and training load. Informal scores track personal patterns and do not establish a diagnosis.
- Use a suitable validated questionnaire at baseline and week 4, such as the FSFI when appropriate. Its four-week recall period differs from the seven-day observation baseline. Weekly informal ratings are not interchangeable with validated scoring.
- Track sexual opportunities and context without setting performance targets. No opportunity to assess response is different from treatment failure.
- If bremelanotide is prescribed, blood-pressure monitoring should follow the clinician's plan. Its label describes peak pressure effects around two to four hours, usually resolving within 12 hours.
- Repeat abnormal or clinically indicated laboratory tests at a clinician-selected interval. Routine weekly hormone panels do not establish libido improvement.

STOP RULES

- Stop exposure and seek emergency care for chest pain, severe breathlessness, fainting, new neurological symptoms, or facial swelling with breathing difficulty.
- A repeated blood pressure of at least 180 mmHg systolic or 120 mmHg diastolic requires urgent assessment. Associated concerning symptoms require emergency care without waiting for repeat measurements. Persistent lesser elevations also require review before further exposure.
- Stop and contact the prescriber for severe or persistent vomiting, dehydration, new pigmentation changes, or symptomatic slowing of heart rate. Bremelanotide-associated pigmentation may persist after discontinuation.
- An erection lasting four hours requires emergency assessment regardless of the suspected cause.
- Stop exposure and seek clinical review for suspected pregnancy, new pelvic pain, abnormal bleeding, or major mood deterioration.

EXPECTED TIMELINE

Week 1 establishes an observation baseline. Event-related observations may occur during weeks 2 to 4, but four weeks cannot establish durable effectiveness. Bremelanotide's pivotal randomized treatment periods lasted 24 weeks, PMID 31599840. Acute kisspeptin-54 laboratory responses do not predict sustained kisspeptin-10 benefit. Oxytocin's eight-week treatment periods did not demonstrate superiority over placebo, PMID 26151620. Changes during this framework remain vulnerable to expectation, context, and natural symptom variation.

EXIT PLAN

End the assessment at week 4 and review benefit against adverse effects and burden. The Vyleesi label specifies discontinuation after eight weeks without symptom improvement. It does not prescribe tapering. This framework establishes no combination washout or reset interval. Oxytocin's two-week research washout was a crossover-design feature, not proof of a necessary clinical reset. Participants in research follow the study's discontinuation rules. Unresolved pain, endocrine symptoms, mood, sleep, and medication effects warrant reassessment rather than automatic repetition.

COMMON MISTAKES

- Treating low desire, erectile dysfunction, and orgasm difficulty as the same diagnosis.
- Applying bremelanotide's evidence outside its established indication or overlooking medical, relationship, and medication explanations.
- Citing kisspeptin-54 studies as proof for kisspeptin-10.
- Equating an LH or testosterone increase with improved sexual wellbeing.
- Changing several interventions simultaneously and assigning causality to the peptide.
- Interpreting improvement during both placebo and oxytocin periods as proof of oxytocin efficacy.
- Treating the beginner educational level or four-week calendar as validation of a treatment regimen.

TRACKER FIELDS

Primary symptom · Desire score 0 to 10 · Distress score 0 to 10 · Arousal score 0 to 10 · Orgasm satisfaction 0 to 10 · Sexual pain 0 to 10 · Sexual opportunities and context · Validated questionnaire name date score recall period · Blood pressure readings mmHg · Resting heart rate bpm · Weight kg if relevant · Waist cm if relevant · Average sleep hours · Fatigue score 0 to 10 · Training hours and intensity · Menstrual or menopausal context · Medication and alcohol changes · Prescribed exposure name dose unit route datetime · Exposure timing relative to food training sleep · Adverse event onset severity duration · Laboratory result date units · Clinician review and next decision

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PROTOCOL 14 · SKIN

Skin, Hair and Connective Tissue

BEGINNER · 12 WEEKS · CORE: GHK-CU, ARGIRELINE · SUPPORT: EPITALON

A 12-week educational framework for assessing topical peptide evidence, tracking skin tolerance and appearance, and recognizing when hair or connective tissue symptoms need diagnosis. Modest cosmetic improvement is possible. Hair regrowth, tendon repair and systemic rejuvenation are not established outcomes of this framework.

WHO IT IS FOR

Adults who train, have stable general health and intact skin, and want to evaluate cosmetic peptide claims using consistent photographs and symptom records. Beginner refers to the tracking framework and topical scope. The compounds have not been validated together as a clinical protocol, and simultaneous exposure is not required.

WHO SHOULD NOT RUN IT

People seeking treatment for sudden hair loss, infected wounds, scarring alopecia, acute tendon injury or uncontrolled inflammatory skin disease. Known allergy to a formulation or its ingredients excludes that formulation. Pregnancy, breastfeeding, active cancer treatment or recent skin procedures require individualized clinical review. These are assessment precautions, not a validated contraindication list for every cosmetic peptide.

THE LOGIC

Assessment begins with symptoms that can obscure cosmetic interpretation: dermatitis, infection, allergy, scalp inflammation and unexplained shedding. Sleep, stress, energy availability, recent illness and existing treatments provide additional context. Metabolic disease and nutritional deficiencies merit assessment when the history supports it. This is a practical review order, not a biological hierarchy or treatment sequence proven in trials.

GHK-Cu research concerns extracellular matrix turnover, fibroblast activity and tissue remodeling. PMID 29986520 summarizes small human cosmetic studies, including conference reports and a book chapter. Its reporting does not establish a standardized concentration or reproducible amount per application. Cosmetic evidence is provisionally B, with low confidence because much of the evidence is summarized indirectly. Hair regrowth and clinical tendon repair are not established by these sources. Laboratory collagen findings do not demonstrate stronger tendons in exercising adults.

Argireline has narrower human evidence concerning facial wrinkles. A randomized study enrolled 60 participants and evaluated topical exposure over four weeks, supporting grade B, PMID 23417317. Its small size and short follow-up limit generalization. Proposed effects on neurotransmitter release do not establish clinically meaningful muscle paralysis from ordinary topical exposure.

Epitalon remains research context only, with no active treatment phase. Its cell-culture telomere findings are grade D for this skin goal, PMID 40908429. The paper has a published correction replacing incorrect figures, PMID 41240216. Human cells in a dish are not human clinical evidence. The broader review discusses human research on other endpoints, but does not validate skin rejuvenation or this framework, PMID 40141333. Separating observation periods can help characterize irritation, but cannot prove synergy or isolate ingredient effects without adequate controls.

COMPONENTS · DOSES AS REPORTED IN THE SOURCES NAMED

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
GHK-Cu	Topical evidence candidate for skin texture and appearance. Provisionally B, with low confidence, for small cosmetic studies summarized in PMID 29986520. Hair and musculoskeletal benefits remain unestablished.	Topical concentrations around 0.05% to 0.1%, applied once or twice daily: commonly cited in non-clinical use; not validated in trials. This range is not established by PMID 29986520. That review reports topical cream applied twice daily for 12 weeks, without a reproducible concentration or mg per application. PMID 29986520 supports biological rationale and secondary descriptions of cosmetic schedules. Several underlying reports have limited accessible methods. The non-clinical concentration range is not a therapeutic target.	Topical exposure on intact skin. The cited cosmetic observations do not validate injectable administration, open-wound treatment or delivery through microneedling. · Twice-daily topical application is described in PMID 29986520. This reports a study schedule, not an individual recommendation or evidence that formulations are interchangeable.	No demonstrated relationship to meals, training or bedtime. Cleansing, sweating and other topical exposures belong in the record because they can affect interpretation and tolerance.	Weeks 2 to 12 are an observation window if topical use is independently chosen. Eleven weeks of exposure does not reproduce the review's 12-week observations.	No validated concentration escalation exists. Limited-area tolerance assessment may identify irritation but cannot exclude later allergy. Formulation instructions and clinical context remain relevant; no escalation schedule is assigned.
Argireline	Topical evidence candidate for localized facial wrinkle appearance. Grade B: a retrieved randomized study enrolled 60 participants and assessed four weeks, PMID 23417317.	PMID 18498523 reports a topical emulsion described as containing 10% Argireline for 30 days; application frequency is unspecified in its abstract. PMID 23417317 reports topical application twice daily for four weeks; its abstract does not specify concentration or mg per application. These details cannot be merged into one verified regimen. PMIDs 18498523 and 23417317 support formulation-specific cosmetic observations. They do not validate interchangeable preparations, a combined GHK-Cu regimen or the entire 12-week framework.	Topical facial skin exposure. The randomized study evaluated skin around the eyes, not the ocular surface. These studies do not establish scalp or tendon applications. · Twice-daily topical application was studied in PMID 23417317. The amount delivered remains formulation-specific and cannot be calculated from application frequency alone.	No established food, sleep or exercise timing requirement. Consistent photographs and expression improve comparison. Permitted application areas depend on the formulation; skin around the eyes differs from direct eye exposure.	Weeks 4 to 7 provide a four-week assessment window. Observation through week 12 extends beyond the randomized trial's duration and does not establish longer-term efficacy.	No validated step-up concentration schedule exists. A declared percentage may describe an ingredient solution rather than pure peptide. The abstract alone cannot resolve formulation equivalence or justify concentration escalation.

COMPOUND	ROLE	REPORTED DOSE	ROUTE · FREQUENCY	TIMING	WEEKS	TITRATION
Epitalon	Research context only. Grade D for skin rejuvenation: telomere and gene-expression endpoints in cultured cells do not establish clinical cosmetic benefit.	PMID 40908429 reports direct culture-medium exposure to 1 mcg/mL Epitalon daily for three weeks in normal human fibroblast and epithelial cells. Culture medium was refreshed daily. This is an in vitro concentration, not a topical, oral or injectable human dose. No validated human skin regimen is established by these references. PMID 40908429 provides the culture exposure details; PMID 41240216 corrects its figures. PMID 40141333 reviews broader research. Findings concerning the pineal extract Epithalamin cannot automatically be attributed to synthetic Epitalon.	Documented example: direct cell-culture exposure. No human administration route is assigned within this framework. · Daily cell-culture treatment in PMID 40908429. This does not establish a human treatment frequency for skin, hair or connective tissue outcomes.	No validated timing relative to training, food or sleep for this goal. Pineal and melatonin mechanisms do not establish a bedtime skin regimen.	No active treatment weeks. Research review may occur at any point without adding exposure.	None. Laboratory concentrations cannot be converted into personal dosing by body weight, skin area or solution volume. No human escalation or repeat-cycle schedule is assigned.

WEEK BY WEEK

WEEK	ACTIONS	WATCH
1	Establish baseline photographs, skin scores, scalp pattern, sleep and training records. Document cleansing, moisturizer and sun protection. Active dermatitis or unexplained shedding warrants assessment before cosmetic interpretation.	Pre-existing redness, scaling, itching, broken skin and rapidly changing hair density. Baseline symptoms can later be mistaken for formulation effects.
2 to 3	If GHK-Cu topical use is independently chosen, record formulation, declared concentration, exposure area and actual frequency. Document other cosmetic changes and any limited-area tolerance observations.	Immediate burning and delayed eczema. Early softness may reflect the moisturizer base rather than tissue remodeling. Lack of early irritation does not exclude later allergy.
4 to 7	If Argireline is independently evaluated, record its start date and define one wrinkle region for comparison. Weekly photographs use matched lighting and expression. Epitalon remains research context only.	Irritation, eye symptoms and changes in lighting or expression that can mimic improvement. Concurrent GHK-Cu exposure limits attribution; the calendar does not establish a combination regimen.
8 to 10	Review four-week Argireline observations against baseline. Record whether change is visible in matched images and meaningful to the participant. Document training changes and scalp or tendon symptoms separately.	Increasing concentration to chase a plateau, worsening shedding, or pain interpreted as beneficial remodeling. Continued exposure does not establish additional benefit.
11 to 12	Complete matched endpoint photographs and score changes, exposure consistency, irritation and cost. Record the continuation or discontinuation decision. Persistent hair or connective tissue concerns warrant diagnosis.	Changes attributable to sun protection, hydration, recovery or another treatment. These confounders belong in the final assessment, even when appearance improves.

PRE-CHECKS

- Document general health and average sleep duration. Blood pressure, resting heart rate, body weight and waist circumference are optional context, not required topical-peptide screening or efficacy endpoints.
- Photograph the same facial regions and scalp part using fixed lighting, distance, camera settings and hair condition. Define one primary endpoint, such as wrinkle appearance at rest.
- Document eczema, rosacea, contact allergy, scalp disease, hair-loss pattern, recent illness, restrictive dieting, medications, supplements, procedures and existing topical treatments.
- Fasting glucose or HbA1c is relevant when diabetes risk, poor healing or routine screening indicates it. Ordinary cosmetic exposure alone does not establish a need for a metabolic panel.
- For unexplained diffuse shedding or fatigue, a clinician may select CBC, ferritin and TSH based on history. Routine copper, hormone, inflammatory-marker and telomere panels are not established monitoring requirements.
- Sport eligibility requires separate verification. WADA S0 prohibits pharmacological substances without governmental approval for human therapeutic use when no subsequent list section addresses them. The prohibition applies at all times. Absence of a compound's name does not establish permission, and cosmetic availability does not establish therapeutic approval. This framework does not establish compound-specific clearance. Source: WADA 2026 Prohibited List, section S0.

MONITORING

- Weekly: score dryness, redness, itching and burning from 0 to 10. Record duration, location and relationship to each formulation.
- Weekly: record actual exposure days, missed applications, declared concentration, other cosmetic changes, sun exposure and consistency of sun protection.
- Weekly: capture matched photographs and record sleep, stress, training load and relevant weight changes. Apparent improvement from memory alone is unreliable.
- Track hair shedding consistently without interpreting daily fluctuations as regrowth evidence. Record tendon pain during loading and next-day function; worsening symptoms require separate assessment.
- Repeat laboratory tests only for a clinical indication or an abnormal baseline result. No validated blood test measures whether these topical peptides improve cosmetic appearance.

STOP RULES

- Stop the suspected formulation and seek emergency care for breathing difficulty, faintness, or swelling of the lips, tongue or throat. Generalized hives require prompt assessment, especially with systemic symptoms.
- Stop exposure and obtain prompt assessment for blistering, marked facial swelling, severe burning, eye pain or visual disturbance.
- Stop use over an affected area and seek assessment for spreading warmth or redness, pus, fever, or a deteriorating wound.
- Persistent dermatitis after withdrawal, sudden patchy hair loss, scalp scarring or rapidly worsening shedding warrants clinical review.
- An acute tendon pop, new weakness, major swelling or inability to bear weight requires urgent injury assessment.

EXPECTED TIMELINE

Texture changes within days may reflect hydration. Argireline's retrieved randomized evidence concerns four weeks, PMID 23417317. The GHK-Cu review describes cosmetic assessments over eight to twelve weeks, PMID 29986520. Neither timeframe guarantees visible benefit. Twelve weeks may document a hair trend, but cannot establish follicular recovery or tendon repair from these compounds.

EXIT PLAN

At week 12, compare baseline and endpoint images with dates concealed if practical. No taper requirement is established by these sources for ordinary topical cosmetic exposure. A two-to-four-week observation break is an optional tracking choice, not a validated pharmacological washout. Record whether appearance changes or irritation persist, while documenting basic skin care and other exposures. No Epitalon course

or repeat cycle is assigned. Persistent symptoms warrant diagnosis before further cosmetic experimentation.

COMMON MISTAKES

- Equating an ingredient-solution percentage with pure peptide concentration or a known mg dose.
- Treating smoother facial skin as evidence of stronger tendons or hair regrowth.
- Changing several formulations, procedures and supplements together, then attributing improvement to one peptide.
- Converting laboratory telomere findings into claims of longer life, proven clinical benefit or established long-term safety.
- Escalating exposure despite irritation or judging progress from unmatched photographs.
- Combining a concentration from one paper with a frequency from another and presenting the result as a verified regimen.

TRACKER FIELDS

Formulation name and batch · Ingredient id and declared concentration · Exposure area and actual frequency · Exposure days and missed applications · Dryness redness itching burning scores 0 to 10 · Adverse event onset duration and action · Standardized photo identifiers · Primary skin endpoint score · Scalp photo and shedding trend · Tendon pain and function if relevant · Average sleep hours and stress score · Training load and body weight if relevant · Sun exposure and skin care changes · Clinician review and continue pause stop decision

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42. Pickart L et al. Regenerative and Protective Actions of the GHK-Cu Peptide in the Light of the New Gene Data.. *International journal of molecular sciences*, 2018. PMID 29986520 DOI 10.3390/ijms19071987 (GHK-Cu mechanisms and secondary descriptions of small topical cosmetic studies, including twice-daily topical cream exposure for 12 weeks. Several underlying reports are conference material or a book chapter. Does not establish a standardized concentration, injectable regimen or clinical tendon repair.)

43. Reynolds JC et al. MOTS-c is an exercise-induced mitochondrial-encoded regulator of age-dependent physical decline and muscle homeostasis.. *Nature communications*, 2021. PMID 33473109 DOI 10.1038/s41467-020-20790-0 (Grade C for administered MOTS-c performance and healthspan claims: treatment experiments involved mice. Human findings concern endogenous responses to exercise. Neither establishes human treatment efficacy.)

44. Schneider-Helmert D et al. Effects of delta-sleep-inducing peptide on 24-hour sleep-wake behaviour in severe chronic insomnia.. *European neurology*, 1987. PMID 3622582 DOI 10.1159/000116143 (Small positive placebo-controlled, double-blind study in 14 patients. Comparison with PMID 1299794 illustrates inconsistent findings across the cited human DSIP studies.)

45. Shadrina M et al. Comparison of the temporary dynamics of NGF and BDNF gene expression in rat hippocampus, frontal cortex, and retina under Semax action.. *Journal of molecular neuroscience : MN*, 2010. PMID 19662538 DOI 10.1007/s12031-009-9270-z (Grade C animal evidence showing region-dependent and time-dependent neurotrophin gene-expression changes. Does not validate human cognitive benefit.)

46. Teichman SL et al. Prolonged stimulation of growth hormone (GH) and insulin-like growth factor I secretion by CJC-1295, a long-acting analog of GH-releasing hormone, in healthy adults.. *The Journal of clinical endocrinology and metabolism*, 2006. PMID 16352683 DOI 10.1210/jc.2005-1536 (Reported subcutaneous CJC-1295 exposure, sustained endocrine responses, and prolonged pharmacokinetics in two short randomized trials. Grade B for endocrine findings; no musculoskeletal healing outcomes.)

47. Thurston L et al. Effects of Kisspeptin Administration in Women With Hypoactive Sexual Desire Disorder: A Randomized Clinical Trial.. *JAMA network open*, 2022. PMID 36287566 DOI 10.1001/jamanetworkopen.2022.36131 (Grade B acute kisspeptin-54 evidence in premenopausal women with HSDD. Brain-processing findings do not establish durable symptom improvement or chronic kisspeptin-10 efficacy.)

48. Vasireddi N et al. Emerging Use of BPC-157 in Orthopaedic Sports Medicine: A Systematic Review.. *HSS journal : the musculoskeletal journal of Hospital for Special Surgery*, 2025. PMID 40756949 DOI 10.1177/15563316251355551 (Supports grade C for the BPC-157 repair claim: predominantly preclinical findings and weak human orthopedic evidence. Its search ended in June 2024. It does not establish a validated human repair regimen or a complete account of subsequently published evidence.)

49. Wang X et al. A first-in-human, randomized, double-blind, single- and multiple-dose, phase I study of recombinant human thymosin β4 in healthy Chinese volunteers.. *Journal of cellular and molecular medicine*, 2021. PMID 34346165 DOI 10.1111/jcmm.16693 (Grade B for short-term human tolerability and pharmacokinetics of the specific recombinant thymosin beta-4 preparation. This small phase I trial does not validate TB-500 dosing, long-term safety or tendon repair.)

50. Wang Y et al. The anti-wrinkle efficacy of argireline, a synthetic hexapeptide, in Chinese subjects: a randomized, placebo-controlled study.. *American journal of clinical dermatology*, 2013. PMID 23417317 DOI 10.1007/s40257-013-0009-9 (Randomized trial involving 60 participants and twice-daily topical Argireline for four weeks. Supports limited short-term wrinkle evidence. The abstract does not specify concentration or mg per application.)

51. Wilding JPH et al. Once-Weekly Semaglutide in Adults with Overweight or Obesity.. *The New England journal of medicine*, 2021. PMID 33567185 DOI 10.1056/NEJMoa2032183 (Grade A for semaglutide weight reduction. STEP 1 evaluated 68 weeks of treatment with lifestyle intervention in adults without diabetes. It does not establish complete muscle preservation.)

52. Wilding JPH et al. Weight regain and cardiometabolic effects after withdrawal of semaglutide: The STEP 1 trial extension.. *Diabetes, obesity & metabolism*, 2022. PMID 35441470 DOI 10.1111/dom.14725 (Grade B for exploratory withdrawal follow-up. Substantial regain and movement of cardiometabolic measures toward baseline followed cessation of semaglutide and structured lifestyle intervention.)

53. You J et al. Efficacy of thymosin alpha-1 and interferon alpha in treatment of chronic viral hepatitis B: a randomized controlled study.. *World journal of gastroenterology*, 2006. PMID 17075991 DOI 10.3748/wjg.v12.i41.6715 (Disease-specific Thymosin Alpha-1 exposure and outcomes in chronic hepatitis B. Grade B for this small trial with randomized active treatments and historical untreated controls. It does not establish healthy-adult longevity or combination benefit with Thymalin.)

54. Yuan C et al. From Regeneration to Analgesia: The Role of BPC-157 in Tissue Repair and Pain Management.. *International journal of molecular sciences*, 2026. PMID 41898733 DOI 10.3390/ijms27062876 (Updated discussion of preclinical repair mechanisms and limited human pilot studies. It does not establish efficacy for the cited subcutaneous practice.)

55. Ziganshina LE et al. Cerebrolysin for acute ischaemic stroke.. *The Cochrane database of systematic reviews*, 2023. PMID 37818733 DOI 10.1002/14651858.CD007026.pub7 (Systematic assessment of acute-stroke trials. Found no established mortality benefit and a potential increase in nonfatal serious adverse events with Cerebrolysin.)

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