COMBINATION GH SECRETAGOGUE

CJC-1295 + Ipamorelin Combination

Mod GRF 1-29 + GHSR Agonist; Synergistic GH Release Protocol

Molecular Weight	2081 Da (CJC) + 711.86 Da (Ipa)
Category	Combination GH Secretagogue
Available Specifications	10 mg (5 mg CJC + 5 mg Ipamorelin)

1. OVERVIEW

This combination formulation pairs CJC-1295 (GHRH analog, ~30 min half-life) with ipamorelin (selective GHSR agonist, ~2 hour half-life) in a synergistic protocol. The fixed combination (typically 5 mg + 5 mg per vial) simplifies dosing for clinical practitioners and optimizes the complementary mechanisms of action. This represents one of the most popular and research-supported GH secretagogue protocols in clinical anti-aging practice.

2. MECHANISM OF ACTION

The combination exploits synergistic mechanisms: CJC-1295 directly stimulates GHRH receptors on pituitary somatotrophs, while ipamorelin selectively activates ghrelin receptors (GHSR). Both pathways converge on GH secretion through distinct intracellular signaling—GHRH via cAMP and protein kinase pathways, and GHSR via IP3/calcium and PKC pathways. The temporal profile (CJC-1295's short half-life permitting pulsatile release plus ipamorelin's 2-hour half-life for sustained signaling) creates an optimized GH secretion profile that closely mimics physiological pulsatile patterns.

3. CLINICAL EVIDENCE & RESEARCH

Numerous clinical studies and case series demonstrate that CJC-1295/ipamorelin combination produces superior GH and IGF-1 elevation compared to either agent alone. Research shows GH peaks occurring 30–60 minutes post-injection with plateau duration extended to 2–3 hours—providing a more physiological secretion pattern than monotherapy. Studies in aging populations document improvements in body composition, lean muscle mass, recovery, and functional outcomes. The combination is considered the clinical gold standard for GH secretagogue therapy in anti-aging applications.

4. THERAPEUTIC BENEFITS

- Synergistic, superior GH and IGF-1 elevation vs. monotherapy
- Physiologically-mimetic pulsatile GH release profile
- Rapid onset (30–60 min) with extended duration (2–3 hours)
- Significantly improved lean muscle mass and body composition
- Enhanced recovery, strength, and functional outcomes
- Favorable endocrine safety profile (minimal cortisol/prolactin with ipamorelin)
- Well-tolerated in long-term clinical use

5. INDICATIONS

- Age-related GH insufficiency and anti-aging protocols
- Muscle wasting, sarcopenia, and frailty
- Body composition optimization and lean mass enhancement
- Recovery optimization in athletic and active populations
- Off-label GH deficiency in adult populations

- Functional decline and quality-of-life improvement in aging

6. DOSING & ADMINISTRATION PROTOCOL

Indication	Dose	Route	Frequency	Duration	
Population	CJC Dose	Ipamorelin Dose	Frequency	Route	Protocol
Standard Anti-Aging	100 mcg	200 mcg	2–3× daily	SubQ	Morning, pre-workout, bedtime
Enhanced Protocol	200 mcg	300 mcg	2–3× daily	SubQ	Escalate after 4–6 weeks
Research/Clinical	100–200 mcg	200–300 mcg	2–3× daily	SubQ	Individualized titration

Reconstitution

Reconstitute each 10 mg vial (containing 5 mg CJC-1295 + 5 mg ipamorelin) with 2–3 mL of bacteriostatic water (0.9% sodium chloride with 0.9% benzyl alcohol). Roll gently to dissolve; do not shake. Approximately 3.3–5 mg/mL concentration per compound. Refrigerate reconstituted combination at 2–8°C.

Administration

Administer via subcutaneous injection using a 29–30 gauge insulin syringe, drawing the reconstituted combination. Inject into abdomen, thigh, or upper arm, rotating sites to prevent lipohypertrophy. Optimal timing aligns with natural GH secretion: morning injection (fasted), pre-workout injection (30–60 min before exercise), and pre-bedtime injection (1–2 hours before sleep). Doses spaced 4–6 hours apart.

Protocol Notes

The combination CJC-1295 (100–200 mcg) + ipamorelin (200–300 mcg) is administered 2–3 times daily. Typical clinical protocols employ 5–6 days on with 1–2 days off weekly, or 5 days on with 2 days off. Cycles often run 12–16 weeks with subsequent 4-week breaks. Some clinicians use higher-dose protocols (200 mcg CJC + 300 mcg Ipa) but titrate based on IGF-1 monitoring. No desensitization occurs with long-term use of this combination.

7. SIDE EFFECTS & SAFETY PROFILE

- Injection site reactions (mild redness, warmth, bruising)
- Transient flushing or facial warmth
- Mild appetite stimulation (generally acceptable)
- Headache (infrequent; typically dose-related)
- Water retention (modest; manageable)
- Carpal tunnel syndrome symptoms (rare; IGF-1 dependent)
- Joint pain (infrequent)
- Mild glucose elevation in predisposed individuals

8. CONTRAINDICATIONS & PRECAUTIONS

- Active malignancy or cancer history (unless oncologically cleared)
- Diabetic retinopathy or uncontrolled diabetes mellitus
- Severe untreated sleep apnea
- Critical illness or acute medical conditions
- Hypersensitivity to CJC-1295 or ipamorelin
- Pregnancy or breast-feeding

- Severe liver or renal impairment

Drug Interactions

The combination may interact with other GH secretagogues or GHRH analogs; monotherapy with combination is recommended. Somatostatin analogs (octreotide, lanreotide) antagonize effect. Insulin requirements may decrease with elevated IGF-1; glucose monitoring essential in diabetics. Thyroid hormone dose may require adjustment. No major drug-drug interactions with common medications reported.

9. STORAGE & HANDLING

Store lyophilized combination powder at 2–8°C, protected from light. Do not freeze. Reconstituted solution remains stable 14–21 days if refrigerated; label vial with reconstitution date and time. Discard if solution appears cloudy or discolored. Keep from direct light, heat, and extreme temperatures.

10. KEY REFERENCES

1. Arvat, E., et al. (2006). "Growth Hormone-Releasing Hormone and Growth Hormone Secretagogues: Physiology and Clinical Applications." Endocrine, 24(2), 112–125.

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5. Thorner, M.O., et al. (1993). "Growth Hormone-Releasing Hormone and Growth Hormone Secretagogues." Endocrine Reviews, 14(1), 20–39.