Hexarelin — Basic Review Questions

1. What is hexarelin, what type of peptide is it, and what is its regulatory status?

Answer: Hexarelin is a synthetic hexapeptide growth hormone secretagogue built on the GHRP-6 scaffold. It acts on the GHS-R1a (ghrelin) receptor and releases about twice as much GH as an equimolar dose of GHRH. It is not FDA-approved (a research compound) with no completed human outcomes trials, and it is WADA-prohibited; all clinical use is off-label and investigational.

2. How does hexarelin work?

Answer: Like the other GHRPs it acts on two receptors. Through the ghrelin receptor it drives pulsatile GH release, promotes the body's own GHRH, and lifts the somatostatin brake (raising IGF-1 while keeping feedback intact). Through the CD36 receptor — which it engages more strongly than any other GHRP — it produces a distinct, GH-independent set of cardiovascular and metabolic effects.

3. What makes hexarelin distinctive among the GHRPs?

Answer: It is the most "cardiac" GHRP, with the strongest CD36 arm. That gives it human-confirmed positive inotropy (stronger heart contraction without raising heart rate), antifibrotic effects, and — most distinctively — a reverse-cholesterol-transport effect: through CD36 → PPAR-γ it boosts cholesterol efflux out of cells without increasing the uptake of oxidized LDL, which is why its CD36 activity is considered cardioprotective rather than plaque-promoting.

4. What is the main trade-off with hexarelin compared to the other GHRPs?

Answer: Two cautions set it apart. It has the highest tachyphylaxis (receptor desensitization) of the GHRPs — though the attenuation is partial and fully reversible after about a 4-week washout — and it raises cortisol and prolactin more as the dose climbs, making it less "clean" than ipamorelin. These two issues are the main reason hexarelin is used carefully and at low doses.

5. How is hexarelin dosed, and why does the dose matter so much?

Answer: Because hexarelin desensitizes the receptor most and its cortisol/prolactin effects rise with dose, the guidance is to keep each injection low — about 50–100 mcg, or even 25–50 mcg paired with a GHRH analog for a strong but clean pulse. A revealing finding is that a low dose plus GHRH gives a massive GH release with minimal cortisol, while a high dose alone drives up cortisol and prolactin. Doses are spaced at least 3 hours apart, given fasted, and cycled (commonly 12 weeks on, 4 weeks off — the washout that fully restores the receptor).

6. What are the main side effects and cautions?

Answer: The dominant concern is the partial, reversible GH tachyphylaxis with chronic use, along with dose-dependent cortisol and prolactin elevation, occasional water retention, and a small transient glucose rise from GH briefly opposing insulin. It is contraindicated in active cancer, active pituitary disease, and pregnancy, and used cautiously in active coronary artery disease (its CD36 action can raise coronary

perfusion pressure). As with the others, uncontrolled diabetes should be corrected first, and it is prohibited for drug-tested athletes.