### PRESCRIPTION MONOGRAPH

Compounded Active Ingredients: LGD-4033 Form: Oral Capsule

## **Drug Class:**

Selective Androgen Receptor Modulator (SARM)

#### Mechanism of Action1:

LGD-4033 is intended to

- Bind selectively to androgen receptors in muscle and bone, while avoiding activation in most prostate and skin receptors.
- Promote lean muscle growth by stimulating protein synthesis and increasing muscle fiber size.
- Enhance bone strength by androgen receptor activation in bone tissue.
- Limit androgenic side effects by avoiding major conversion to DHT or estradiol, unlike anabolic steroids.

# **Indications Commonly Prescribed for:**

- Muscle-wasting and cachexia
- Osteoporosis: Explored for improving bone density and reducing fracture risk
- Frailty in the elderly: Studied for functional improvement and sarcopenia

**Before Use:** Let your health care provider know if you have any medication allergies before you take this compounded preparation. Let your health care provider know if you have any liver or kidney problems. Let your healthcare provider know of all supplements you are currently taking.

## **Contraindications:**

 Should not be used in patients with hormone-sensitive cancers, cardiovascular disease, or hepatic/renal impairment.

Cautions: Let your Healthcare provider know if you experience any adverse side effects.

**How to Use**: This compounded preparation is in the form of an oral capsule. Swallow the capsule whole with a glass of water. Do not chew or crush the capsule. If you miss a dose, take as soon as you remember, but not at the time for the next dose. Desired results may take up to several weeks.

### **Warnings and Precautions:**

- Liver effects: SARMs may affect liver enzymes.
- Hormonal suppression: Can lower natural testosterone, LH, and FSH levels, potentially causing hypogonadism after discontinuation.
- Cardiovascular risk: Concerns about lipid changes (lower HDL, possible increased LDL).

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#### **Adverse Reactions:**

- Hormonal suppression
- Decreased HDL cholesterol
- Mild GI effects
- Fatigue, nausea, or muscoskeletal pain

#### Interactions:

- Theoretical additive risk with hepatotoxic agents, anabolic steroids, or other SARMs.
- May interfere with hormonal therapies (TRT, HRT).

## **Use in Specific Populations:**

- Pregnancy/Lactation: Contraindicated; not studied.
- Pediatrics: Not studied; avoid use.
- Older adults: Studied for frailty; monitor closely.

# Storage:

- Store in original container at room temperature (up to 30°C or 86°F)
- · Store in a cool dry place away from heat, sunlight, and moisture

# **Monitoring Parameters:**

- Hormonal profile: Testosterone, LH, FSH.
- Liver function tests: AST, ALT, bilirubin.
- Lipid profile: HDL, LDL, triglycerides.
- Body composition: Lean body mass, fat distribution.
- Bone density: DEXA scans in osteoporosis/frailty research.

#### Citations:

 Basaria S, Collins L, Dillon EL, et al. The safety, pharmacokinetics, and effects of LGD-4033, a novel nonsteroidal oral, selective androgen receptor modulator, in healthy young men. J Gerontol A Biol Sci Med Sci. 2013;68(1):87-95. doi:10.1093/gerona/gls078