

LPCN 2401

Obesity Management – adjunct
to GLP-1



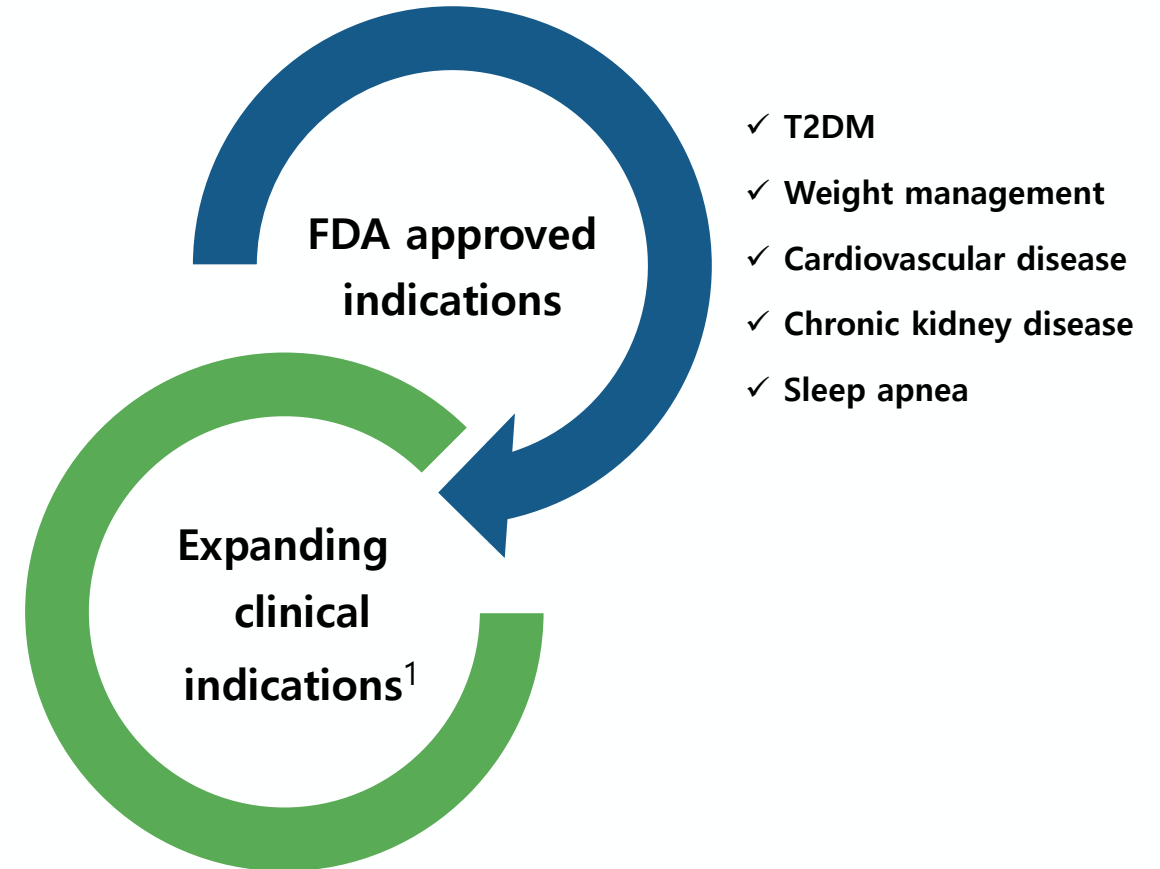
Unprecedented Demand and Usage of GLP-1 Receptor Agonists¹⁻³

GLP-1 market trending toward oral once daily dosing

Semaglutide: **\$30 billion sales** in the US in 2024⁴
Tirzepatide: **\$14 billion sales** in the US in 2024⁵

As of 2024, **around 12 percent of U.S. adults** reported having used a GLP-1 medication at some point⁶

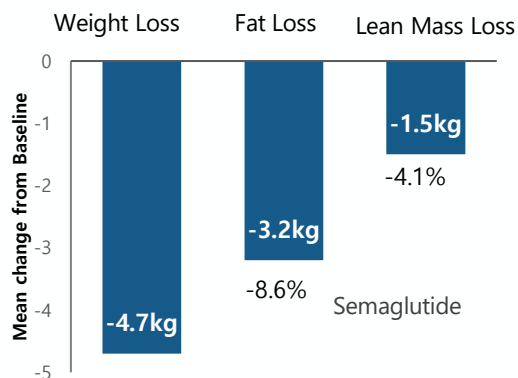
Over **150 GLP-1 drug candidates** in development for multiple indications⁷



Drawbacks of Approved GLP-1 Receptor Agonists

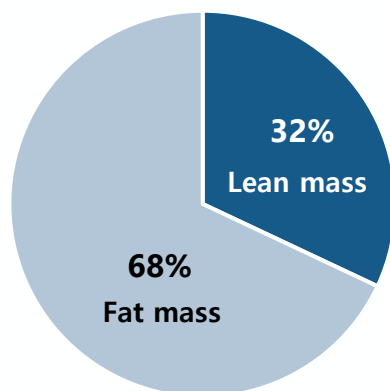
Rapid loss of lean mass and functionality in elderly GLP-1 users

Low Quality Weight Loss¹



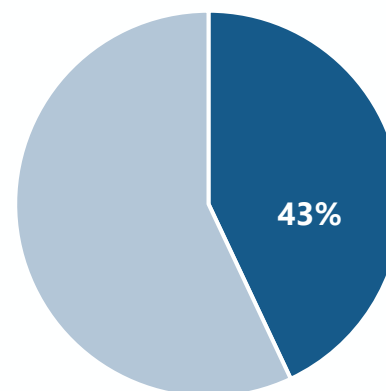
Significant weight loss is from lean mass loss in **16 weeks**¹

Lean Mass Loss¹



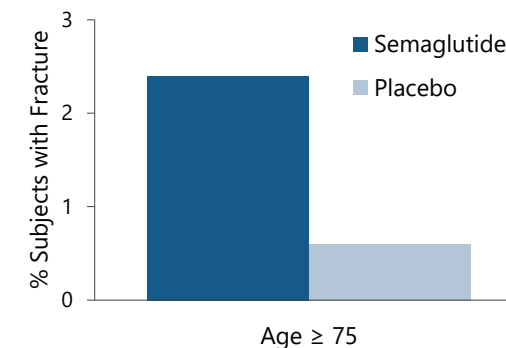
The median percentage of total body weight loss that is due to lean mass: 32% in **16 weeks**¹ (elderly 60+) 35% in 24 weeks³ (adults 18-80)

Functionality Loss¹



43% of elderly (60+) lost ≥10% Stair Climb Power from baseline in **16 weeks** of GLP-1 use¹

Fracture Risk^{2,3}



Patients on semaglutide had significantly more fractures of the hip and pelvis²

LPCN 2401 Once Daily Oral as An Adjunct to GLP-1 Treatment

Proven potential to improve body composition - quality weight loss with quality fat loss

Product Candidate Attributes

Proprietary androgen receptor agonist, testosterone ester(s), targeted for **once-a-day treatment** - "LPCN 2401"

- Androgen receptor agonist with α -tocopherol for once-a-day treatment – "LPCN 2401+E"
- A bioidentical to physiological regulator of myostatin that indirectly inhibits its expression and signaling

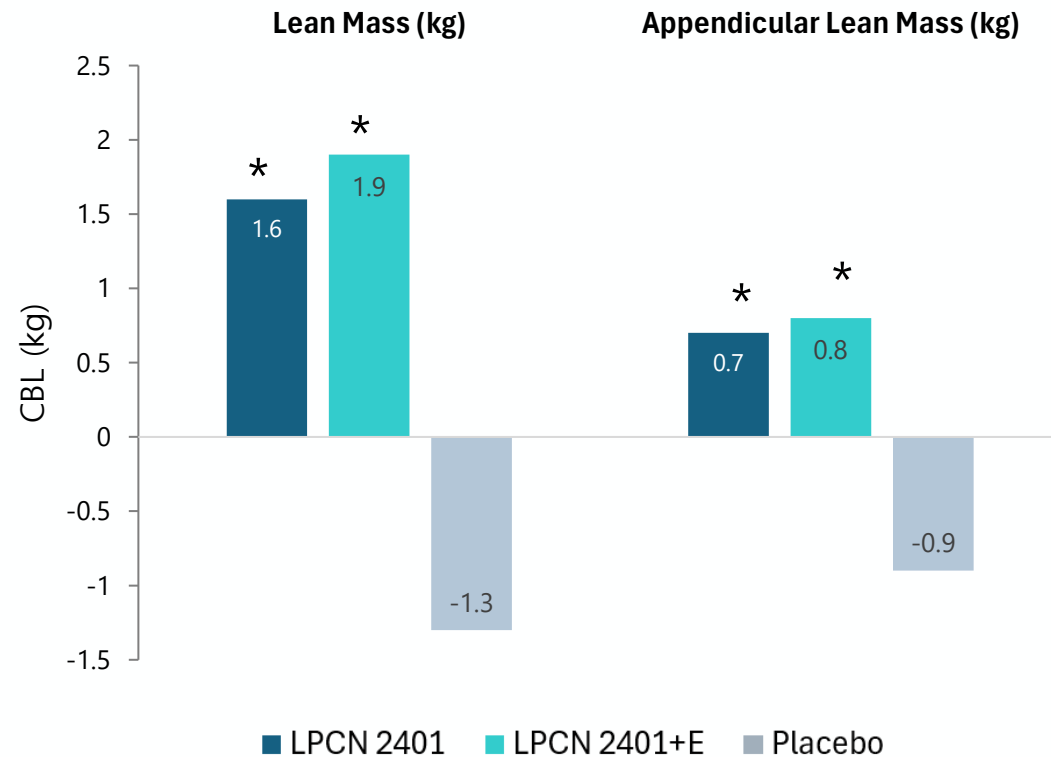
Targeted Mechanism of Actions

	Fat	Muscle	Bone
Androgen Receptor Agonist	<ul style="list-style-type: none">• Induces lipolysis¹• Lowers lipogenesis¹• Inhibits expression of adipocytokines (e.g., leptin, TNF-α, IL-6, IL-1) ²	<ul style="list-style-type: none">• Stimulates muscle satellite activator, FGF2³• Modulates muscle growth suppressors MRF4 and myostatin (GDF8) expression in skeletal muscle³	<ul style="list-style-type: none">• Acts directly on osteoblasts and consequently promotes bone formation⁴• Increases AR expression level in osteoblasts^{4,5}

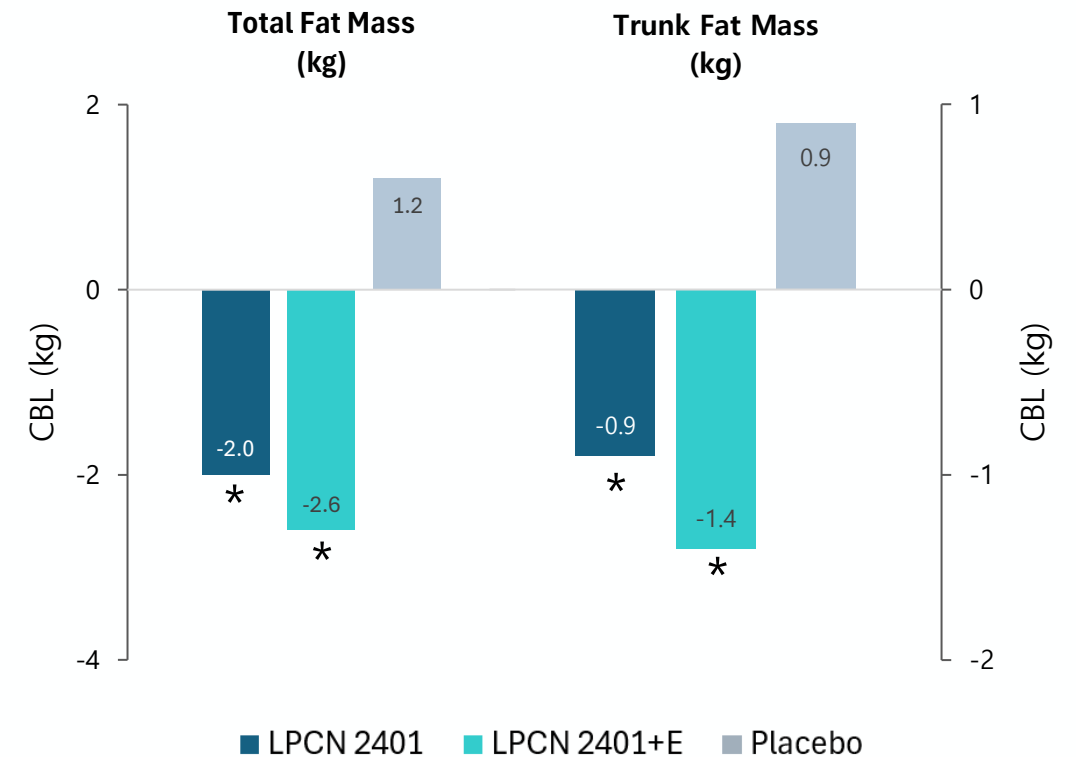
LPCN 2401 – Clinical Data Show Significant Improvement in Body Composition

Phase 2 results demonstrate increased lean mass and decreased fat mass at Week 20

Lean Mass



Fat Mass



LPCN 2401 Novel Oral Treatment for Obesity Management

Target benefits to improve weight loss and functionality

Quality Weight Loss

Preserve lean mass

Primarily fat loss

Attenuate functionality loss

Amplify fat loss

More abdominal fat loss

Improve bone health

LPCN 2401 + GLP-1 agonist treatment

Maintain Weight Loss

Minimize fat regain

Minimize weight regain

Maintain/improve functionality

Improve lean mass

Sustain HbA1c improvement

LPCN 2401 treatment post GLP-1 cessation