

# AI-03081 GLP-1 No Progress

Owner	Ⓜ Rigel Arcayan
Tags	MD
Created time	@October 16, 2025 1:18 AM

GLP-1 zero progress in weight loss but clothing is a little loose now post 3 weeks of the medication. A 58 years old Asian, female, retired RN , 137 lbs, 5'1' height is wondering why there is no significant progress of weight loss. She now exercises on the elliptical machine for 45 minutes everyday. She is healthy but just a little heavier in the weighing scale.

What are the general and realistic progress of weight loss with glp-1?

GLP-1 receptor agonists typically produce gradual, clinically meaningful weight loss, but little or no change is expected in the first few weeks; most patients see significant progress only after several months of therapy. In clinical trials, average weight loss with semaglutide and similar agents ranges from about 5% to 15% of baseline body weight over 6 to 18 months, with the most rapid loss occurring in the first 6 months and plateauing thereafter.[1][2][3][4][5][6][7][8] For a patient weighing 137 lbs (62 kg), a 5–15% reduction would be 3–9 kg (7–20 lbs) over a year or more.

Early changes (first 3–4 weeks) are usually minimal. Most protocols start with a low dose and titrate up to minimize gastrointestinal side effects, so the full therapeutic dose—and thus maximal weight loss effect—may not be reached for several weeks.[9][10][11] Patients often report subjective changes (e.g., looser clothing) before seeing measurable weight loss, likely due to shifts in fluid balance or body composition.

Individual response varies. Factors such as baseline BMI, age, sex, and adherence to lifestyle changes (diet, exercise) influence outcomes. Those with higher baseline BMI, younger age, and female sex tend to lose more weight.[1] For patients with BMI near the overweight/obesity threshold (as in this case, BMI ≈

25.9), absolute weight loss may be less pronounced, but even modest reductions can improve health risks.

Realistic expectations:

- First month: Minimal weight loss (often [1][2][3][4][5][6][7][8])

Lifestyle changes remain essential. GLP-1 RAs are adjuncts to diet and exercise, not replacements. Ongoing physical activity, as described, will support and enhance medication effects.[1][6]

The following table from the medical literature provides context for BMI classification, which is relevant for setting weight loss goals and expectations:

Would you like me to review the evidence on predictors of individual response to GLP-1 receptor agonists—such as genetic factors, baseline metabolic profile, or specific comorbidities—to help identify which patients are most likely to achieve significant weight loss?

#### References

1. Nutritional Priorities to Support GLP-1 Therapy for Obesity: A Joint Advisory From the American College of Lifestyle Medicine, the American Society for Nutrition, the Obesity Medicine Association, and the Obesity Society. Mozaffarian D, Agarwal M, Aggarwal M, et al. *The American Journal of Clinical Nutrition*. 2025;122(1):344-367. doi:10.1016/j.ajcnut.2025.04.023.
2. Efficacy and Safety of Glucagon-Like Peptide-1 Receptor Agonists for Weight Loss Among Adults Without Diabetes : A Systematic Review of Randomized Controlled Trials. Moiz A, Fillion KB, Toutouchi H, et al. *Annals of Internal Medicine*. 2025;178(2):199-217. doi:10.7326/ANNALS-24-01590.
3. The Quantity, Quality and Findings of Network Meta-Analyses Evaluating the Effectiveness of GLP-1 RAs for Weight Loss: A Scoping Review. Nunns M, Febrey S, Buckland J, et al. *Health Technology Assessment (Winchester, England)*. 2025;:1-73. doi:10.3310/SKHT8119.
4. The Weight-Loss Effect of GLP-1RAs Glucagon-Like Peptide-1 Receptor Agonists in Non-Diabetic Individuals With Overweight or Obesity: A Systematic Review With Meta-Analysis and Trial Sequential Analysis of Randomized Controlled Trials. Liu Y, Ruan B, Jiang H, et al. *The American Journal of Clinical Nutrition*. 2023;118(3):614-626. doi:10.1016/j.ajcnut.2023.04.017.

5. Efficacy of GLP-1 Receptor Agonists on Weight Loss, BMI, and Waist Circumference for Patients With Obesity or Overweight: A Systematic Review, Meta-Analysis, and Meta-Regression of 47 Randomized Controlled Trials. Wong HJ, Sim B, Teo YH, et al. *Diabetes Care*. 2025;48(2):292-300. doi:10.2337/dc24-1678.
6. Obesity Management in Adults: A Review. Elmaleh-Sachs A, Schwartz JL, Bramante CT, et al. *JAMA*. 2023;330(20):2000-2015. doi:10.1001/jama.2023.19897.
7. Approach to Obesity Treatment in Primary Care: A Review. Yanovski SZ, Yanovski JA. *JAMA Internal Medicine*. 2024;184(7):818-829. doi:10.1001/jamainternmed.2023.8526.
8. The Efficacy and Safety of Glucagon-Like Peptide-1 Receptor Agonists in Non-Diabetic Adults With Overweight/Obesity: An Umbrella Review of Systematic Reviews and Meta-Analyses. Zamanian N, Imani H, Talebi S, et al. *European Journal of Pharmacology*. 2025;:177966. doi:10.1016/j.ejphar.2025.177966.
9. Management of Adult Overweight and Obesity (OBE) (2020). Erin Arra MS RD CSOWM LD, Charolotte K. Baldrige FNP, Elaine Furmaga PharmD, et al. Department of Veterans Affairs.
10.
  - a. Older Adults: Standards of Care in Diabetes-2025. *Diabetes Care*. 2025;48(Supplement\_1):S266-S282. doi:10.2337/dc25-S013.
11. 2020 Expert Consensus Decision Pathway on Novel Therapies for Cardiovascular Risk Reduction in Patients With Type 2 Diabetes: A Report of the American College of Cardiology Solution Set Oversight Committee. Das SR, Everett BM, Birtcher KK, et al. *Journal of the American College of Cardiology*. 2020;76(9):1117-1145. doi:10.1016/j.jacc.2020.05.037.

Individual response to GLP-1 receptor agonists for weight loss is highly variable, with key predictors including female sex, younger age, higher baseline BMI, non-diabetic status, specific body composition, and certain genetic and metabolic factors. Clinical trials and real-world studies consistently show a wide range of weight loss outcomes, with some patients achieving robust reductions and others

experiencing minimal change.[1][2][3] Identifying predictors is crucial for personalized obesity therapy.[4][5][6]

Demographic and clinical predictors: Greater weight loss is seen in women, younger individuals, those with higher baseline BMI, and those without diabetes.[1][2][3][4][7][8][9] Higher baseline fat mass, lower muscle-to-fat ratio, and elevated hepatic steatosis indices also predict better response.[4][7] Longer treatment duration and use of more potent agents (semaglutide, tirzepatide) are associated with superior outcomes.[3][7][9]

Genetic factors: Emerging evidence highlights the NBEA gene as a significant predictor; individuals with responsive NBEA variants are much more likely to achieve substantial weight loss with GLP-1RAs, supporting future personalized approaches.[5][6]

Metabolic and comorbidity predictors: Higher baseline insulin levels, greater  $\beta$ -cell function (HOMA- $\beta$ ), lower HbA1c, absence of hypertension, and lower ALT are associated with greater weight loss.[2][4][7][9] Diabetes and prior metformin use may reduce response, though concurrent initiation of metformin and GLP-1RA may be synergistic.[4][7][9]

Limitations and future directions: Factors such as race, psychiatric comorbidities, and lifestyle adherence are less well-defined and require further study.[8][10] Overall, female sex, younger age, higher BMI, non-diabetic status, favorable body composition, and certain genetic/metabolic profiles are the strongest predictors of significant weight loss with GLP-1RAs.

Would you like me to summarize the latest evidence on how specific genetic variants—particularly NBEA and others—can be practically incorporated into clinical decision-making for GLP-1RA therapy selection and prediction of weight loss outcomes?

## References

1. Efficacy of GLP-1 Receptor Agonists on Weight Loss, BMI, and Waist Circumference for Patients With Obesity or Overweight: A Systematic Review, Meta-Analysis, and Meta-Regression of 47 Randomized Controlled Trials. Wong HJ, Sim B, Teo YH, et al. *Diabetes Care*. 2025;48(2):292-300. doi:10.2337/dc24-1678.

2. Nutritional Priorities to Support GLP-1 Therapy for Obesity: A Joint Advisory From the American College of Lifestyle Medicine, the American Society for Nutrition, the Obesity Medicine Association, and the Obesity Society. Mozaffarian D, Agarwal M, Aggarwal M, et al. *The American Journal of Clinical Nutrition*. 2025;122(1):344-367. doi:10.1016/j.ajcnut.2025.04.023.
3. Efficacy and Safety of Glucagon-Like Peptide-1 Receptor Agonists for Weight Loss Among Adults Without Diabetes : A Systematic Review of Randomized Controlled Trials. Moiz A, Filion KB, Toutounchi H, et al. *Annals of Internal Medicine*. 2025;178(2):199-217. doi:10.7326/ANNALS-24-01590.
4. Predictive Factors of Body Weight Loss in Patients With Type 2 Diabetes Treated With GLP-1 Receptor Agonists: A 52-Week Prospective Real-Life Study. Vozza A, Triggiani D, Fanelli M, et al. *Frontiers in Endocrinology*. 2025;16:1674308. doi:10.3389/fendo.2025.1674308.
5. Glucagon-Like Peptide-1 Receptor Agonists in the Management of Type 2 Diabetes Mellitus and Obesity: The Impact of Pharmacological Properties and Genetic Factors. Klen J, Dolžan V. *International Journal of Molecular Sciences*. 2022;23(7):3451. doi:10.3390/ijms23073451.
6. Neurobeachin (NBEA) Is a Novel Gene Associated With GLP-1 Receptor Agonist Associated Weight Loss. Mariam-Smith A, Breeyear JH, Daniels NJ, et al. *Diabetes, Obesity & Metabolism*. 2025;. doi:10.1111/dom.16612.
7. Glucagon-Like Peptide-1 Receptor Agonist Treatment Associated Weight Fluctuation and Influencing Factors in Patients With Overweight or Obesity. Wang J, Lin C, Cai X, et al. *Diabetes, Obesity & Metabolism*. 2025;. doi:10.1111/dom.16552.
8. Factors Associated With Weight Loss Response to GLP-1 Analogues for Obesity Treatment: A Retrospective Cohort Analysis. Squire P, Naude J, Zentner A, Bittman J, Khan N. *BMJ Open*. 2025;15(1):e089477. doi:10.1136/bmjopen-2024-089477.
9. Seven Glucagon-Like Peptide-1 Receptor Agonists and Polyagonists for Weight Loss in Patients With Obesity or Overweight: An Updated Systematic Review and Network Meta-Analysis of Randomized Controlled Trials. Xie Z, Zheng G, Liang Z, et al. *Metabolism: Clinical and Experimental*. 2024;161:156038. doi:10.1016/j.metabol.2024.156038.

10. Potential Contributors to Variation in Weight-Loss Response to Liraglutide. Webster CM, Mittal N, Dhurandhar EJ, Dhurandhar NV. Obesity Reviews : An Official Journal of the International Association for the Study of Obesity. 2023;24(7):e13568. doi:10.1111/obr.13568.

Write a discharge letter to this 58 years old glp-1 no significant progress patient and continue to execute subtle life changes.

A discharge letter will be written for a 58-year-old Asian female, retired RN, who has experienced no significant weight loss after three weeks of GLP-1 agonist therapy. The letter will emphasize the expected gradual nature of weight loss with GLP-1s, the importance of ongoing lifestyle changes, and evidence-based recommendations for continued management, as supported by recent guidelines and consensus statements.[1][2][3][4]

#### GLP-1 Discharge Summary

This letter summarizes the current status and recommendations for ongoing management of obesity in a 58-year-old Asian female, retired registered nurse, who initiated GLP-1 receptor agonist therapy three weeks ago. At present, there has been no significant progress in weight loss, though the patient reports subtle changes such as looser clothing.

#### Clinical context:

- Baseline weight: 137 lbs
- Height: 5'1" (BMI  $\approx$  25.9)
- No significant comorbidities
- Engaged in regular aerobic exercise (elliptical, 45 min/day)
- No adverse effects reported

#### Assessment:

GLP-1 receptor agonists are associated with gradual, clinically meaningful weight loss, typically averaging 5–15% of baseline body weight over 6–18 months. Early weight changes are often minimal, especially during initial dose titration. Individual response varies, and lifestyle factors remain crucial for optimizing outcomes.[1][3][4][2]

## Recommendations:

- Continue GLP-1 therapy as prescribed, recognizing that significant weight loss may not be apparent until several months of treatment have elapsed.[1][3][4]
- Maintain regular physical activity and consider incorporating resistance training to preserve muscle mass.[2][3][4]
- Focus on subtle, sustainable lifestyle changes:
- Prioritize nutrient-dense foods, adequate protein intake, and hydration (>2–3 L/day).[2]
- Monitor for gastrointestinal side effects and adjust dietary habits as needed.
- Consider periodic food and activity tracking to guide adjustments.[2]
- Schedule follow-up in 8–12 weeks to reassess weight trajectory, dietary habits, and medication adherence.[2][3]
- If weight loss remains [2]
- Refer to a registered dietitian nutritionist for individualized counseling if available.[2][3]
- Counsel regarding the chronic nature of obesity and the likelihood of weight regain if therapy is discontinued; emphasize the importance of long-term lifestyle management.[2][5][3]

## Plan:

Continue current GLP-1 regimen and lifestyle interventions. Monitor for side effects and weight changes. Reinforce patient-centered goals and shared decision-making regarding ongoing therapy and follow-up.

If any new symptoms or concerns arise, or if there is difficulty with medication adherence or side effects, please contact the clinic for further evaluation.

This discharge letter provides evidence-based guidance for ongoing GLP-1 therapy and lifestyle management, emphasizing realistic expectations and the importance of continued follow-up. Please reach out if further documentation or patient education materials are needed.

Would you like me to review the evidence on predictors of early response to GLP-1 agonists and discuss whether baseline characteristics or early weight changes

can help guide decisions about continuing, adjusting, or switching therapy in this patient?

## References

1. Nutritional Priorities to Support GLP-1 Therapy for Obesity: A Joint Advisory from the American College of Lifestyle Medicine, the American Society for Nutrition, the Obesity Medicine Association, and the Obesity Society. Mozaffarian D, Agarwal M, Aggarwal M, et al. *Obesity* (Silver Spring, Md.). 2025;. doi:10.1002/oby.24336.
2. Integrating Diet and Physical Activity When Prescribing GLP-1s—Lifestyle Factors Remain Crucial. Mehrtash F, Dushay J, Manson JE. *JAMA Internal Medicine*. 2025;.2836533. doi:10.1001/jamainternmed.2025.1794.
3. Nutritional Priorities to Support GLP-1 Therapy for Obesity: A Joint Advisory From the American College of Lifestyle Medicine, the American Society for Nutrition, the Obesity Medicine Association, and the Obesity Society. Mozaffarian D, Agarwal M, Aggarwal M, et al. *The American Journal of Clinical Nutrition*. 2025;122(1):344-367. doi:10.1016/j.ajcnut.2025.04.023.
4. Managing Adverse Effects of Incretin-Based Medications for Obesity. Kushner RF, Almandoz JP, Rubino DM. *JAMA*. 2025;.2836876. doi:10.1001/jama.2025.11153.
5. Obesity Management in Adults: A Review. Elmaleh-Sachs A, Schwartz JL, Bramante CT, et al. *JAMA*. 2023;330(20):2000-2015. doi:10.1001/jama.2023.19897.