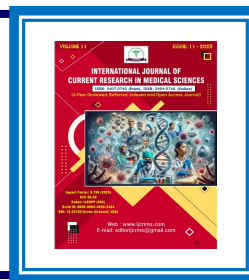




## International Journal of Current Research in Medical Sciences

ISSN: 3107-3743 (Print), ISSN: 2454-5716 (Online)  
(A Peer Reviewed, Indexed and Open Access Journal)  
[www.ijcrims.com](http://www.ijcrims.com)



Review Article

Volume 11, Issue 12 -2025

DOI: <http://dx.doi.org/10.22192/ijcrms.2025.11.12.001>

# A review on Cagrisema vs Existing treatments in treatment of weight loss

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### Abstract

Obesity is a serious health problem worldwide and it is a major contributor to the development of metabolic diseases, cardiovascular problems, and decreased quality of life. The current anti-obesity medications such as GLP-1 receptor agonists, dual incretin agonists, sympathomimetics, and lipase inhibitors, have proven to be effective in terms of weight loss, but their use is often hindered by side effects, plateauing, or suboptimal long-term results. CagriSema, a new combination of cagrilintide (an amylin-like drug) and semaglutide (a GLP-1 receptor agonist), has started to unveil its potential synergistic effects in the early phase of trials with a much greater weight loss and better metabolic parameters than the existing treatments. The review at hand outlines the pharmacological mechanisms, comparative efficacy, and safety profile of CagriSema in relation to current weight-loss therapies. Furthermore, it highlights the therapeutic benefits and futuristic implications of incorporation of CagriSema into the obesity management. The new evidence indicates that CagriSema may be the new standard in the pharmacotherapy of obesity, however, this needs to be confirmed through the ongoing large-scale trials.

**Keywords:** CagriSema; obesity treatment; weight loss drugs; cagrilintide; semaglutide; GLP-1 receptor agonists; amylin analogue; incretin therapy; tirzepatide; anti-obesity pharmacotherapy; metabolic disorders; comparative efficacy; safety profile.

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## Introduction

Obesity has quickly emerged as a global health crisis of huge proportions, startlingly engulfing people of all ages and classes. It is defined mainly by unhealthy body fat levels with subsequent increased risks of suffering from chronic diseases such as type 2 diabetes, heart disorders, arthritis, and some cancers. The prevalence of obesity is still on the rise, with contributing factors being sedentary lifestyles, unhealthy diet, genetic factors, and poverty, among others. The condition also poses a serious economic challenge to the health care systems all over the world. Since obesity can be regarded as a complex multifactorial problem and often cannot be fixed through lifestyle changes only, it necessitates the combination of pharmacological and behavioral strategies as the effective long-term management.[1,2]

Obesity worldwide has never before burdened the human society to these levels and for the first time, more than one billion people are reported to be obese according to recent estimates by various countries. Dietary changes, urbanization, and lack of exercise are the main facilitators of weight gain that affect the inhabitants of the whole world, regardless of their economic status. Individuals suffering from obesity face not only the physical but also the psychological and social suffering caused by the associated health conditions. The situation worsens as the number of patients increases, which leads to healthcare system overload, and thus the animals of interventions that are both effective and widely accessible should be released as soon as possible.[3,4]

Obesity pharmacological treatments have come a long way, although the existing ones still have several limitations that make it hard for them to be effective in the long run. For instance, while many drugs can induce moderate weight loss, patients tend to gain back the lost weight once the drug is stopped. In the meantime, poor adherence is also caused by gastro-intestinal side effects and other side effects, tolerability issues, and safety concerns. Moreover, some drugs have contraindications that limit their use only to

certain populations of patients (e.g., those without comorbidities). The different patient responses make the treatment selection even more complicated as obesity can result from a variety of factors including genetics, metabolism, and behavior. Thus, these difficulties reflect the need for new anti-obesity medications that not only are more effective but also have better tolerability and give more sustained clinical benefits to different patient populations.[5,6]

The current obesity treatments' limitations have spurred the interest in the development of multi-agonist therapies that would tackle multiple metabolic pathways at once. Application of the dual or triple-hormone agonists to the treatment of obesity would result in the elimination of the respective drawbacks of the single mechanisms like enhanced satiety, appetite suppression, glucose metabolism control, plus energy spending increase, thus achieving synergistic effects. Some preliminary clinical studies indicate that such agents might bring about better weight loss and metabolic upgrades than monotherapies. The combinations of multi-agonists like CagriSema are considered a significant breakthrough in the area, as they join the effects of different hormones to outsmart the physiological adaptations which are the main reason for the failure of long-term weight loss. These progressive therapies are likely to change the course of obesity treatment.[7]

## Pathophysiological mechanisms of obesity

### Neurohormonal Dysregulation

The hypothalamus is the master regulating organ over energy homeostasis and it does this by receiving and interpreting signals from hormones like leptin, insulin, ghrelin, GLP-1, and PYY. In fattening, leptin resistance is a major derangement, wherein high leptin levels do not convincingly suppress appetite at all. Besides that, the brain's reduced sensitivity to insulin further hampers the delivery of signals for fullness, while the changed secretion of ghrelin makes one more hungry. This neurohormonal dysregulation consequently causes overeating to continue,

reduced feeling of fullness, and decreased metabolic rate to occur, all of which are factors that carry along with them the tendency to gain weight over a long time.[8]

### **Adipose Tissue Dysfunction and Inflammation**

The expansion of adipose tissue leads to fat cells getting bigger and stressed out metabolically. This, in turn, leads to inflammation that is chronic but low-grade, which is indicated by the increase in the secretion of pro-inflammatory cytokines such as TNF- $\alpha$  and IL-6, and at the same time the immune cells get involved. The unhealthy adipose tissue further releases higher amounts of free fatty acids than usual, and this compounds the situation by inducing lipotoxicity, insulin resistance, and fatty deposits in inappropriate areas. Moreover, changes in the levels of adiponectin and leptin hormones, where the latter is elevated and the former is reduced, upset metabolic regulation and subsequently create a cycle where the increase in adiposity and metabolic complications are driven on and on.[9]

### **Gastrointestinal Hormones and Gut Microbiome Alterations**

The GI tract not only helps to eliminate waste but also controls the appetite and metabolism through various hormones such as GLP-1, PYY, CCK, and ghrelin. Impaired secretion of satiety-promoting hormones and exaggerated hunger signals are the main contributors to the increased caloric intake in obese individuals. Besides, changes in the gut microbiome, such as decreased diversity, increased energy harvest, and increased gut permeability, are also factors that lead to inflammation and metabolic dysregulation. The combination of these gastrointestinal and microbial alterations becomes a major impediment to nutrient sensing and appetite control.[10]

### **Genetic, Epigenetic, and Environmental Factors**

Obesity is significantly influenced by genetic predisposition, with the changes in genes such as FTO and MC4R impacting appetite, energy

metabolism, and fat distribution. Early-life nutrition, stress, and environmental exposure lead to epigenetic modifications that further alter metabolic pathways. The environment also affects health negatively through sedentary lifestyle, consumption of high-calorie food, stress, lack of sleep, and socio-economic status disparities—these are all factors that make the physiological weaknesses worse. All the aforementioned factors gradually set up a biological circumstance that is an ally to weight gain and a hindrance to weight control over a long term.[11]

## **Cagrisema**

Inherent metabolic adaptation of the body usually leads to regain of weight and short-term or inadequate weight loss with traditional obesity treatments. CagriSema is one of the multi-agonist therapies that activate various hormonal systems responsible for regulating appetite, nutrient handling, and energy balance, thus providing a solution. It is by stimulating amylin and GLP-1 receptors at the same time that CagriSema hampers compensatory increases in hunger and adaptive thermogenesis, thus producing more durable effects. This approach is seen as moving away from single-pathway modulation and towards comprehensive metabolic targeting, which is supported by the fact that complex conditions like obesity require multi-mechanistic interventions. Therefore, CagriSema fulfills a clinical requirement for effective, long-lasting and safe weight-loss treatments that have not been met before.[12]

### **Composition of CagriSema: Cagrilintide and Semaglutide**

CagriSema is a combination of two pharmacologically active substances: cagrilintide, a long-acting amylin mimic, and semaglutide, the well-known GLP-1 receptor agonist. Cagrilintide, although it is the modified natural amylin peptide, has, however, been subjected to amino-acid substitutions that enhance its molecular stability and decrease aggregation risk. Semaglutide, on the other hand, has certain changes that make it resistant to DPP-IV breakdown and a fatty-acid chain that aids in connecting with albumin for

prolonged release. This fixed-dose combination is prepared taking into account the once-weekly subcutaneous administration route that results in predictable pharmacokinetics. The two drugs, therefore, act on different receptors but at the same time their actions in appetite suppression, gastric emptying, glycemic regulation, and weight reduction are enhanced.[13]

### **Structural Modifications Supporting Enhanced Potency**

CagriSema's two constituents have undergone structural modifications aimed at maximizing their clinical effectiveness. Cagrilintide has undergone amino acid changes that give it an advantage over the receptor and also make it last longer, thus allowing for the constant opening of the amylin pathways related to the feeling of fullness and the movement of food through the stomach. On the other hand, Semaglutide is modified through the addition of a fatty acid chain of C18, which significantly increases the binding to the albumin and at the same time reduces the clearance by the kidneys. These structural changes help in extending the exposure to the drug in the body, thus enabling engagement of receptors for the entire letting cycle of the drug. The stability, lower immunogenicity, and prolonged action of both compounds guarantee a predictable pharmacodynamic profile, which in turn increases patient compliance and the success of the weight management therapy.[14]

### **Synergy of Combined Molecular Architecture**

The mix of cagrilintide and semaglutide in one prodrug is a pharmacological synergy based on their complementary structures and mechanisms. Semaglutide, mainly working through central GLP-1 receptors, regulates appetite and glucose control while cagrilintide does so by increasing satiation and delaying gastric emptying through amylin receptor pathways. The fact that both drugs are resistant to enzymatic degradation and have prolonged half-lives is the basis for their overlapping yet independent activation patterns. This dual-hormone approach increases metabolic flexibility, decreases compensatory hunger, and leads to significantly better and longer-lasting

weight-loss effects, making CagriSema a cutting-edge therapeutic innovation.[15]

## **Mechanism of action of cagriSema**

### **Dual Hormonal Activation: Amylin and GLP-1 Pathway Synergy**

CagriSema achieves its therapeutic effect through the simultaneous activation of the amylin and GLP-1 receptor systems, each of which controls separate but interlinked aspects of energy balance. The action of amylin receptors diminishes the amount of food consumed by reinforcing the signals of fullness and by the delayed process of emptying the stomach, while the action of GLP-1 receptors not only mediates the central nervous system to suppress the desire for food but also enhances the control of blood sugar levels. These actions, when working together, lead to effects that are more than just additive in terms of weight loss and making the body more efficient in metabolism. This dual hormonal stimulation outperforms monotherapy by engaging multiple physiological pathways of hunger, food reward, nutrient absorption, and glucose regulation.[16]

### **Modulation of Hypothalamic Appetite-Regulating Centers**

CagriSema has an effect on the main hypothalamic nuclei that regulate feeding behavior, namely the arcuate, paraventricular, and lateral hypothalamic areas. On the one hand, Semaglutide brings about the activation of the POMC/CART neurons that provide the signals of satiety; meanwhile, on the other, it also blocks the pathways of the orexigenic NPY/AgRP neurons. Cagrilintide to some extent fortifies this action by energizing the amylin-responsive neurons that are situated in the area postrema and nucleus tractus solitarius. Such neurons are the ones that carry satiety signals to the hypothalamic regions. This concerted modulation leads to the suppression of both homeostatic hunger and hedonic eating. Consequently, patients have less of an urge to eat, and the frequency of their meals is reduced and energy intake remains lower for a longer period of time.[17]



### **Delayed Gastric Emptying and Enhanced Satiety Signaling**

Gastric emptying delay attended mostly by cagrilintide and with assistance from semaglutide is the main mechanism of CagriSema's action. Delayed gastric emptying leads to prolonged gastric distension which is accompanied by the elevation of satiety hormone release thus, limiting caloric intake after meals. This phenomenon plays a crucial role in preventing overeating and minimizing post-meal glucose spikes. CagriSema thus prolongs the feeling of fullness limiting the size of meals and lessening cravings, thus leading to weight loss that is both significant and permanent. The long-lasting gastro-intestinal transit time also curtails the reward-driven food intake that comes with fast digestion.[18]

### **Regulation of Glucose Metabolism and Insulin Dynamics**

By stimulating GLP-1 receptors, the drug semaglutide makes pancreatic  $\beta$ -cells react better, increases insulin secretion in a glucose-dependent manner, and stops the release of glucagon inappropriately. These processes lead to lower fasting and after-meal glucose levels, energy metabolism becoming more flexible, and thus insulin resistance being less. Cagrilintide plays a role as it facilitates the above processes indirectly by making a person eat less and slowing down the absorption of carbohydrates. Altogether, the results are a greater control over blood sugar levels, less lipotoxicity, and a favoring of fat burning. Thus, the rebalancing of metabolism not only helps with weight loss but also prevents the emergence of obesity-related complications like type 2 diabetes.[19]

### **Reduction of Reward-Driven Eating and Food Cravings**

CagriSema acts by interacting with the brain's reward pathways through the alteration of dopamine and opioid signaling resulting in a decrease of the reinforcing properties of the food that is very tasty. It has been shown that GLP-1 agonists can decrease food reward sensitivity whereas amylin analogues can cause reduced

hyperphagia in the case of being conditioned. The effect of CagriSema is seen in the reduction of cravings, emotional eating, and the occasional binge which are the major causes of treatment-resistant obesity. Through the impact on both homeostatic and hedonic motivators of consumption CagriSema helps to develop healthier eating habits and at the same time, it is easier to follow a restriction in caloric intake for the long term.[20]

### **Promotion of Fat Loss through Improved Metabolic Efficiency**

CagriSema's all-the-hormones-in-one-go approach leads to increased fat burning and less fat deposition. The better insulin sensitivity cuts down the liver's fat and the lower food intake takes away from the body the necessary amount of fat storage material. Eventually, metabolic dynamics get shifting in such a way as to create a negative energy balance that supports the releasing of adipose tissue. The reduction of fat in the abdomen and under the skin is more significant in the combination therapy group compared to GLP-1 alone, according to clinical reports. The significant reduction of the dangerous fat areas has a positive effect on the heart and metabolism.[21]

### **Counteraction of Physiological Weight-Regain Mechanisms**

The physiological responses that make people hungrier and decrease their energy expenditure are usually the main reasons for the failure of weight maintenance in the long term. CagriSema, on the other hand, deals with these compensatory mechanisms by maintaining one's feeling of fullness and controlling blood sugar tightly. Its long action prevents the ups and downs of hunger hormones like ghrelin, which leads to avoidance of rebound over-eating. Besides, better metabolism allows a person to avoid the drop in resting energy budget which is usually the case during weight loss. This metabolic adaptation resistance from both sides not only helps to manage weight in the long run but also makes it less likely for the person to regain lost weight.[22]

## Pharmacokinetics (ADME) profile of cagrisema

PK Parameter	Cagrilintide	Semaglutide	CagriSema Combined Profile
<b>Absorption</b>	Slow, sustained absorption after SC injection; bioavailability ~60–70%; peak levels reached in 2–4 days.	High bioavailability for a peptide (~89% SC); peak concentrations achieved in 1–3 days.	Complementary absorption profiles support once-weekly dosing with stable plasma concentrations.
<b>Distribution</b>	Moderate distribution; strong albumin binding extends circulation time.	Extensive albumin binding delays clearance and prolongs half-life.	Minimal drug–drug interference; both maintain prolonged distribution for sustained receptor engagement.
<b>Metabolism</b>	Degraded via proteolytic pathways into inactive fragments.	Metabolized by proteolytic cleavage and $\beta$ -oxidation of fatty-acid chain.	No metabolic competition; combined hormonal activity maintained throughout dosing cycle.
<b>Elimination</b>	Slow renal and hepatic elimination; half-life ~7–10 days.	Very slow clearance; half-life ~7 days enabling weekly dosing.	Harmonized elimination allows steady-state exposure and overlapping pharmacodynamics.
<b>Steady-State Achievement</b>	Achieved within 4–6 weeks.	Achieved within 4–5 weeks.	Steady state for the combination observed within 4–6 weeks, facilitating predictable efficacy.
<b>Dosing Profile</b>	Once-weekly SC injection when combined with semaglutide.	Once-weekly SC injection.	Fixed-dose weekly injection with enhanced tolerability and simplified adherence. [23,24]

## Existing weight-loss treatments

### 1. Sympathomimetic Appetite Suppressants (e.g., Phentermine, Diethylpropion)

These drugs lead to the release of norepinephrine in the hypothalamus, which in turn activates the POMC/CART satiety pathway while NPY/AgRP hunger signals are turned off. The body's help in this way reduces the need for food, lowers the number of meals, and makes the person more alert. Through this mechanism, their weight loss effect occurs mainly due to the impact on caloric intake, whereas increased energy expenditure plays a less significant role.[25]

### 2. Lipase Inhibitor (Orlistat)

Orlistat is a drug with a local action in the GI tract only and inhibits gastric and pancreatic lipases

responsible for dietary triglycerides breakdown. Consequently, approximately 30% of the fat consumed goes out of the body without being absorbed, thus creating a caloric deficit. Its effects mainly occur in the digestive system because it is very minimally absorbed into the bloodstream.[26]

### 3. GLP-1 Receptor Agonists (Semaglutide, Liraglutide)

The mechanism of action of GLP-1 agonists include the slowing of gastric emptying and the enhancement of satiety signaling, which lead to the activation of POMC pathways in the hypothalamus and hence the suppression of appetite. In addition, these drugs improve insulin secretion that is glucose-dependent and decrease the release of glucagon. All these metabolic and appetite-modulating effects together lead to a

reduction in caloric intake that is sustained over time and thereby clinically significant weight loss.[27]

#### 4. GIP/GLP-1 Dual Agonists (Tirzepatide)

Tirzepatide works by activating both the GIP and GLP-1 receptors at the same time, which results in increased insulin sensitivity, enhanced postprandial insulin release, and lowered glucagon secretion. It also plays a very important role in appetite suppression, which it achieves through central CNS pathways, and slows down gastric emptying. The combined activation of incretin pathways leads to a metabolic and weight-loss effect that is greater than the one produced by the single-agonist GLP-1 therapies because of the synergistic hormonal modulation.[28]

#### 5. Amylin Analogues (Cagrilintide, Pramlintide)

Amylin analogues activate amylin receptors located in the area postrema and nucleus tractus solitarius (NTS), which results in the sensations of increased fullness, decrease in portion size, and major delay in gastric emptying. In addition, they play a role in the adjustment of glucagon secretion during and after meals. This effect combined acts to suppress the desire for food and lowers the intake of calories, which is a great advantage for those who are suffering from unregulated eating patterns or experiencing hyperglycemia after meals.[29]

#### 6. Opioid/Dopamine Modulators (Naltrexone–Bupropion)

The combination of drugs is directed towards those who eat due to rewards as it modifies the signaling of dopaminergic and opioid system. Bupropion activates POMC neurons which results in the production of the hormone that makes one feel satiated, whereas naltrexone inhibits the process of feedback inhibition, making the suppression of appetite last longer. In alliance, they enfeeble cravings, hedonic hunger and stressful or emotional overeating habits.[30]

#### 7. Serotonergic Modulators (Lorcaserin – withdrawn in many regions)

Lorcaserin preferentially activated 5-HT<sub>2C</sub> receptors located on POMC neurons, thus stimulating the release of  $\alpha$ -MSH and inducing satiety, but without the risk of considerable activation of the dopaminergic or adrenergic systems. This allowed the drug to suppress feeding by making the central satiety signals stronger. Even though it was effective, it had to be taken off the market because of worries regarding long-term cancer risk.[31]

#### 8. SGLT2 Inhibitors (Dapagliflozin, Empagliflozin – modest weight loss)

These medications are the ones that lead to an increase in the amount of glucose that is excreted through the urine by blocking SGLT2 (sodium-glucose cotransporter 2) in the proximal renal tubule. The loss of glucose calories (around 200–300 kcal/day) results in a negative energy balance. Although a rise in appetite might occur due to their action, they still allow obtaining modest fat loss and bringing about positive changes in cardiometabolic parameters.[32]

#### 9. Metformin (Indirect weight-loss effect)

Besides hepatic glucose production decrease, metformin alters insulin sensitivity at peripheral tissues positively and also increases gut hormone responses that includes GLP-1 secretion. Insulin resistance is alleviated and the appetite is lowered indirectly hence weight loss is promoted modestly. Its gut effects further lead to diminished caloric intake.[33]

### Efficacy of cagrisema

CagriSema has proven to be much more powerful in terms of weight loss compared to mono-agonist therapies, especially GLP-1 receptor agonists like semaglutide. CagriSema has been shown through various clinical studies that the combination of cagrilintide with semaglutide gives even bigger reductions in body weight. In fact, many people lose so much weight that they have exceeded the set thresholds for clinically significant change.

The mechanism behind this effect is the multi-dimensional influence of appetite, satiety, and metabolism that allows for larger caloric deficit and longer-term adherence.

In addition to weight loss, CagriSema also helps to reduce the percentage of body fat and visceral fat significantly, which are two main reasons of heart-metabolism related problems. Imaging studies on trial participants point out that the weight-loss caused by CagriSema is mainly due to fat mass decrease rather than losing lean body mass. Thus the harmful fat depots such as visceral fat are destroyed selectively, resulting in improvement in insulin sensitivity, lipid profiles, and inflammatory markers, thus making it relevant for therapeutic use in obesity-related metabolic disorders.

The CagriSema treatment yields strong metabolic advantages, especially for diabetes patients or those who are prediabetic or insulin resistant. Research shows and confirms these patients have better fasting glucose, HbA1c, and postprandial metabolic responses. The combination of GLP-1 and amylin pathways intensifies blood sugar control while at the same time causing prolonged feeling of fullness and lowered calorie intake. These metabolic changes happen together with the weight loss, implying that CagriSema gives complete cardiometabolic protection that is better than single-hormone therapies.[34]

One of the main factors contributing to the effectiveness of CagriSema is its property to counteract the physiological changes that prevent the issue of weight loss from being completely solved. Clinical studies have shown that there are patients who keep losing weight for a long time, while minor rebounds in weight have been monitored compared to traditional methods used in therapy. The prolonged action of the combination, the strong appetite suppression, and the stable glycemic effects all together have resulted in the changes in the behavior and physiology of the patients being durable. Thus, CagriSema with its long-term stability appears to be a promising next-generation drug for chronic obesity treatment.

## Safety profile of cagrisema

CagriSema has a favourable safety profile, comparable with its separate constituents, semaglutide and cagrilintide. Mostly, gastrointestinal disturbances (including nausea, vomiting, constipation, and diarrhea) feature as common adverse effects, usually mild or moderate, being their manifestations decreasing as the dose is increased. Hypoglycaemia remains low when devoid of insulin or sulfonylureas action, as insulin accustomed to the glucose-dependent action. Transient increases in heart rate and mild injection-site reactions are observed but rarely lead to discontinuation. Studies yet do not show significant safety concerns regarding pancreatitis, gallbladder events, or cardiovascular instability; nevertheless, these are potential areas of concern as more late long-term data become obtainable. In general, CagriSema is well tolerated in keeping with the established safety profile of incretin-based and amylin analogue therapies.[35]

## Comparative analysis of cagrisema with existing weight-loss agents

### 1. CagriSema vs. GLP-1 Receptor Agonists (Semaglutide, Liraglutide)

#### Efficacy

CagriSema leads to more significant weight loss than GLP-1 monotherapies since it activates both amylin and GLP-1 simultaneously. Though semaglutide causes considerable weight loss, the addition of cagrilintide promotes fullness, prolongs gastric emptying, and lessens compensatory hunger responses. Clinical data reveal that CagriSema causes a change in the percentage of body weight that is larger and more sustained than the single use of semaglutide or liraglutide.

#### Safety

Nausea, vomiting, and decreased appetite are some of the adverse effects both medications have on the gastrointestinal tract; nonetheless, CagriSema might slightly aggravate GI



intolerance because of the increase in satiety that is the effect of the combination. However, the overall safety profile is very similar, and there are no significant differences regarding hypoglycemia or cardiovascular risk. The use of liraglutide and semaglutide requires daily and weekly dosing, respectively, while CagriSema's combined weekly dosing may lead to a better patient compliance without putting safety at risk.[36]

## 2. CagriSema vs. GIP/GLP-1 Dual Agonist (Tirzepatide)

### Efficacy

The combined activation of GLP-1 and GIP receptors produces a significant effect of weight loss with Tirzepatide, but CagriSema's amylin receptor stimulation adds to the already great effect of gastrin secretion and gastric emptying which CagriSema has. While the metabolic flexibility is improved by the use of tirzepatide, the broader appetite-control profile of CagriSema leads to more gradual and huge long-term weight-loss effects that are more consistent and larger.

### Safety

The usual gastrointestinal side effects that are encountered when using incretin-based therapies are one of the main concerns with Tirzepatide. The second drug CagriSema has a similar safety profile but with a slightly higher incidence of nausea and vomiting owing to the dual action of the hormones. The risk of hypoglycemia in both treatments is very low, especially if no concomitant insulin is given. So the risk of side effects is about the same but CagriSema may be more understandable tolerability due to gradual dose increase.[37]

## 3. CagriSema vs. Amylin Analogue (Pramlintide)

### Efficacy

Pramlintide, the amylin analogue that is short-acting, gives modest weight loss and still requires several daily injections. Cagrilintide, which is included in CagriSema, has a long-acting and very potent characteristic. When used along with semaglutide, the combined effect is far more

appetite suppression and sustained weight loss than pramlintide therapy alone could produce.

### Safety

Pramlintide is linked to nausea and hypoglycemia risk when co-administered with insulin. CagriSema does not expose its patients to this risk because its components do not cause insulin-independent hypoglycemia. Its once-a-week dosing makes it more convenient and less adherence challenging. GI symptoms are still considered as the most frequent adverse events but their severity is usually mild to moderate.[38]

## 4. CagriSema vs. Lipase Inhibitor (Orlistat)

### Efficacy

Inhibition of fat absorption is the main mechanism of action for Orlistat, and this results in only a slight reduction in the body weight. Furthermore, it has no effects on hunger or the brain's satiety pathways. On the other hand, CagriSema leads to a significant reduction in the body weight facilitated by combined hormonal mechanisms which include the feeling of fullness, delayed gastric emptying, and better metabolic control. The clinical results are strongly in favor of CagriSema, first, in the magnitude and then also in the duration of weight loss.

### Safety

The primary side effects of Orlistat are gastrointestinal—steatorrhea, oily stools, and fat-soluble vitamin deficiency. CagriSema does not have these problems, GI side effects being mainly Vomiting and Appetite suppression. CagriSema has a higher metabolic effect, while Orlistat is only associated with weight loss benefits in cardiovascular and metabolic aspects.[39]

## 5. CagriSema vs. Sympathomimetic Agents (Phentermine, Phentermine/Topiramate)

### Efficacy

Sympathomimetics are believed to cause the loss of about 3-5 kg of weight in the short run through their action on the brain's appetite regulation

center. Their influence in the long run is also dependent on the level of tolerance acquired. On the other hand, CagriSema provides effective and long-term weight loss through the hormone's interaction and long-lasting pharmacokinetics. Its effect is more than phentermine and above the combination of phentermine/topiramate therapy which still has a higher impact.

### Safety

Phentermine brings about the risk of heart conditions such as fast heart rate and high blood pressure. CagriSema, on the other hand, is free from these sympathomimetic side effects and has a better cardiovascular safety profile. Although CagriSema may cause digestive symptoms, it is still considered safe for patients with heart-related and metabolic conditions and can be used in long-term treatment plans.[40]

## 6. CagriSema vs. Naltrexone/Bupropion

### Efficacy

Naltrexone/bupropion influences the reward-driven eating but results only modest weight loss if compared to therapies that are based on incretin

or amylin. CagriSema delivers much higher efficacy by addressing several hunger and metabolic pathways at once. This dual hormone action results in an increase in the percentage of total body-weight loss and a better regulation of both homeostatic and hedonic hunger.

### Safety

Naltrexone/bupropion is capable of triggering psychiatric effects, increased blood pressure, and seizure risk in those who are susceptible to such problems. CagriSema presents a more advantageous safety profile, with adverse reactions mainly limited to tolerable gastrointestinal symptoms. Furthermore, it does not have the neuropsychiatric and cardiovascular concerns that are linked with naltrexone/bupropion, thus making it more appropriate for the long-term management of obesity.[41]

Parameter	Cagri Sema (Cagrilin-tide + Semaglutide)	GLP-1 RAs (Semaglutide, Liraglutide)	GIP/GLP-1 RA (Tirzepatide)	Amylin Analogues (Pramlintide)	Lipase Inhibitor (Orlistat)	Sympathomimetics (Phentermine, Phentermine/Topiramate)	Naltrexone/Bupropion
Mechanism of Action	Dual amylin + GLP-1 receptor activation → strong satiety, delayed gastric emptying, appetite suppression	GLP-1-mediated satiety, slowed gastric emptying, glucose control	Dual GIP + GLP-1 activation → enhanced insulin response, appetite suppression	Amylin receptor activation → satiety, slow gastric emptying	Inhibits GI lipases → reduces fat absorption	CNS appetite suppression via noradrenergic + GABA modulation	Modulates reward pathways, reduces cravings[42]
Average Weight Loss (% body weight)	≈ 15–20% (highest among tested agents)	10–15%	15–22%	3–5%	3–5%	5–10% (higher with combination)	5–8%

<b>Glucose &amp; Metabolic Effects</b>	Strong improvement in insulin sensitivity, glycemic control	Significant improvement	Very strong (anti-diabetic + weight loss)	Minimal metabolic benefit	Neutral	Mild improvement	Mild improvement
<b>Dosing Frequency</b>	Once-weekly SC	Daily (liraglutide) / weekly (semaglutide) SC	Once-weekly SC	Multiple daily injections	Oral TID	Oral daily	Oral daily
<b>Advantages</b>	Superior weight loss, dual satiety pathways, reduced cravings, durable effects	Robust efficacy, cardio-protective, widely studied	Strongest single-molecule weight loss	Useful as adjunct for postprandial control	Non-systemic, oral	Cost-effective, rapid appetite suppression	Targets reward-driven eating
<b>Limitations</b>	GI symptoms, cost, long-term data still emerging	GI side effects	Early GI intolerance, cost	Frequent injections, low efficacy	GI disturbances, poor adherence	Cardiovascular risks, insomnia	Nausea, neuropsychiatric concerns[43]

## Advantages of cagrisema over other agents

### 1. Superior Weight-Loss Efficacy

CagriSema has proven to be more effective and reliable than GLP-1 monotherapies, GIP/GLP-1 dual agonists, and traditional agents in the area of weight loss. The simultaneous activation of amylin and GLP-1 pathways yields stronger appetite suppression and better metabolic regulation. Hence, more significant and longer lasting weight loss is the case especially for the individuals who do not respond well to the existing treatments.

### 2. Dual Mechanistic Synergy

CagriSema is not a single-drug treatment that targets only one pathway, but it integrates amylin-mediated satiety enhancement and GLP-1-driven

appetite suppression and glycemic control. This double mechanism cuts through compensatory hunger channels and lessens metabolic adaptation. Consequently, patients consume less calories for a longer period of time and their weight loss is not only more effective but also easier to maintain in the long run.[44]

### 3. Improved Glycemic and Metabolic Outcomes

CagriSema is significantly more effective than any other anti-obesity drug in the areas of insulin sensitivity, glycemic control, and lipid parameters. The combination of cagrilintide and semaglutide works to increase insulin secretion in a glucose-dependent manner and to decrease glucagon activity. Thereby, the wide range of metabolic advantage helps those with obesity-related metabolic dysfunction or prediabetes the most.

#### **4. Greater Reduction in Visceral and Hepatic Fat**

Research supports the claim that CagriSema is the most effective in eliminating visceral fat and liver fat, as it has better results than properly dosed GLP-1 agonists. More specifically, it wins over the harmful fat tissues by increased satiety, slowing the gastric emptying, and enhanced metabolic flexibility, thus making the reduction of cardiometabolic risk more effective than with traditional therapies.

#### **5. Enhanced Adherence Through Once-Weekly Dosing**

Cagrilintide and semaglutide both have a long half-life which allows them to be dosed only once a week. This way people will stick to the treatment better than if they receive it daily or take it orally. The predictable pharmacokinetics and very good tolerability increase the chances of long-term compliance, thus making CagriSema easier to use for the treatment of obesity in the long run.

#### **6. Lower Risk of Weight Regain**

CagriSema combats the physiological mechanisms that usually lead to weight regain like rebound hunger, reduced energy expenditure and hormonal interchanges. Simultaneous activation of the two mechanisms keeps hunger in check and stabilizes the metabolism. This is a big plus compared to the usual agents whose efficacy dwindles with time.[45]

### **Future research directions**

#### **1. Long-Term Safety and Metabolic Outcomes**

Future investigations should determine the long-term safety profile of CagriSema beyond the usual clinical trial periods. The studies should be directed at the chronic metabolic changes, cardiovascular and renal outcomes, and also possible gastrointestinal or neurohormonal consequences of a long-term dual-agonist treatment. Longitudinal studies based on real-world evidence will be necessary to find out if the

weight loss and metabolic benefits are lasting, as well as to detect any adverse reactions that may arise late in their course.[46]

#### **2. Mechanistic Studies Using Advanced Biomarkers**

An additional mechanistic study is required to determine how CagriSema affects the central appetite control systems, gut-brain communication, and the body's energy output. The use of multi-omics technologies, such as metabolomics, neuroimaging, proteomics, and microbiome profiling, may lead to the discovery of other pathways that are modified by the dual amylin/GLP-1 activation. These findings could help to better define the patient population to be treated and also lead to the next generation of multi-hormone therapeutics.

#### **3. Evaluation in Special Populations**

Diversification of the research population in future trials should be done to gain insights on the efficacy and safety of CagriSema. This diversifying of the trial population should include older adults, adolescents, people with extremely compromised liver or kidney function, and individuals suffering from obesity-related conditions like PCOS, NAFLD, and heart diseases. Providing more evidence in these populations will be instrumental in determining the best dosing, contraindications, and customized therapeutic approaches.[47]

#### **4. Comparative and Head-to-Head Clinical Trials**

Emerging multi-agonists such as GLP-1/GIP/GLP-2 or amylin/GIP hybrids will be compared directly with CagriSema and thus, the positioning of CagriSema in the new therapeutic landscape will be known. The performance of clinical trials with respect to weight-loss durability, metabolic impacts, patient-reported outcomes, and the cost-effectiveness of the therapies will all be crucial in providing evidence that would support clinical decision-making and the integration of such practices through the provision of guidelines.



## 5. Combination Therapy and Multi-Agonist Expansion

The exploration of CagriSema's effectiveness together with other drug treatments could bring about more than just the sum of the single effects, for instance, SGLT2 inhibitors, lipolysis-stimulating agents, or even novel drugs. Tri-agonist or multi receptor-agonist combination therapeutics inspired by CagriSema's triumphs may take the field into new heights with more powerful and long-lasting weight loss result products.

## 6. Optimization of Dosing, Delivery Systems, and Patient Adherence

Research aimed at enhancing patient compliance in the future should consider the alternative delivery platforms, such as oral peptide formulations, implantable depots, or sustained-release injections. Use of computer modeling could allow the creating of patient-specific dosing plans based on a patient's pharmacokinetics, body makeup, and metabolic type. It also might be helpful to know the behavior and the patient's adherence in order to be able to design an effective treatment in the real world.

## 7. Cost-Effectiveness and Public-Health Impact

The use of anti-obesity drugs will become more common and, therefore, it becomes very important that CagriSema is evaluated economically and from the public health point of view accordingly. The research should be undertaken to find out how much the healthcare costs, related to diabetes, cardiovascular, and other obesity-induced complications, can be reduced. Economic modelling will be the basis for policy formation and access plans.[48]

## Conclusion

CagriSema symbolizes a great improvement in the field of obesity pharmacotherapy as it binds the effects of cagrilintide and semaglutide together to get the strongest and longest-lasting weight loss. Clinical proofs show much better efficiency than the current monotherapies and their combinations, which are, in fact, good appetite suppression, diabetes control and fat loss

that are greater. Its safety profile is still the same as what was established for incretin-based and amylin-based therapeutics, and the side effects are mostly related to gastro-intestinal tract and usually they are not severe and go away quickly. Since the world obesity is a major health concern that is getting bigger and bigger, CagriSema is considered a next-generation drug with the capability of addressing the complex nature of weight regulation. The long-duration studies, real-life data, and mechanism-related research will help to elucidate its exact position in current obesity management plans further.

## References

1. Rubenstein AH. Obesity: a modern epidemic. *Trans Am ClinClimatol Assoc.* 2005;116:103-11; discussion 112-3
2. Kuczmarski RJ, Flegal KM, Campbell SM, Johnson CL. Increasing prevalence of overweight among US adults: the National Health and Nutrition Examination Surveys, 1960–1991. *JAMA.* 1994;272:205–211.
3. Kushner RF, Roth JL. Assessment of the obese patient. *Endocrinology and Metabolism Clinics.* 2003;32(4):915–33.
4. Calle EE, Kaaks R. Overweight, Obesity and Cancer: Epidemiological Evidence and Proposed Mechanisms. *Nature Reviews.* 2004;4:579–591.
5. Collins P, Williams G. Drug treatment of obesity: from past failures to future successes? *Br J ClinPharmacol.* 2001 Jan;51(1):13-25
6. Seidell JC, Flegal KM. Assessing obesity: classification and epidemiology. *Br Med Bull.* 1997;53:13–25.
7. Goldney J, Hamza M, Surti F, Davies MJ, Papamargaritis D. Triple Agonism Based Therapies for Obesity. *CurrCardiovasc Risk Rep.* 2025;19(1):18.
8. Timper K, Brüning JC. Hypothalamic circuits regulating appetite and energy homeostasis: pathways to obesity. *Dis Model Mech.* 2017 Jun 1;10(6):679-689
9. Kawai T, Autieri MV, Scalia R. Adipose tissue inflammation and metabolic dysfunction in obesity. *Am J Physiol Cell Physiol.* 2021 Mar 1;320(3):C375-C391

10. De Silva A, Bloom SR. Gut Hormones and Appetite Control: A Focus on PYY and GLP-1 as Therapeutic Targets in Obesity. *Gut Liver*. 2012 Jan;6(1):10-20.
11. Panera N, Mandato C, Crudele A, Bertrando S, Vajro P, Alisi A. Genetics, epigenetics and transgenerational transmission of obesity in children. *Front Endocrinol (Lausanne)*. 2022 Nov 14;13:1006008
12. Dutta D, Nagendra L, Harish BG, Sharma M, Joshi A, Hathur B, Kamrul-Hasan A. Efficacy and Safety of Cagrilintide Alone and in Combination with Semaglutide (Cagrisema) as Anti-Obesity Medications: A Systematic Review and Meta-Analysis. *Indian J EndocrinolMetab*. 2024 Sep-Oct;28(5):436-444.
13. Kruse T, Hansen JL, Dahl K, Schäffer L, Sensfuss U, Poulsen C, Schlein M, Hansen AMK, Jeppesen CB, Dornonville de la Cour C, Clausen TR, Johansson E, Fulle S, Skyggebjerg RB, Raun K. Development of Cagrilintide, a Long-Acting Amylin Analogue. *J Med Chem*. 2021 Aug 12;64(15):11183-11194
14. Gu, Yi-min & Yuan, Qing-ning& Li, Xin& He, Qian&Xu, Eric & Zhao, Li-hua. (2025). Structural and mechanistic insights into dual activation of cagrilintide in amylin and calcitonin receptors. *ActaPharmacologicaSinica*. 10.
15. Becerril, Sara &Frühbeck, Gema. (2021). Cagrilintide plus semaglutide for obesity management. *Lancet (London, England)*. 397. 10.
16. Garvey WT, Blüher M, Osorto Contreras CK, Davies MJ, Winning Lehmann E, Pietiläinen KH, Rubino D, Sbraccia P, Wadden T, Zeuthen N, Wilding JPH; REDEFINE 1 Study Group. CoadministeredCagrilintide and Semaglutide in Adults with Overweight or Obesity. *N Engl J Med*. 2025 Aug 14;393(7):635-647.
17. Qualls-Creekmore E, Münzberg H. Modulation of Feeding and Associated Behaviors by Lateral Hypothalamic Circuits. *Endocrinology*. 2018 Nov 1;159(11):3631-3642
18. Klein SR, Hobai IA. Semaglutide, delayed gastric emptying, and intraoperative pulmonary aspiration: a case report. *Can J Anaesth*. 2023 Aug;70(8):1394-1396.
19. Meloni AR, DeYoung MB, Lowe C, Parkes DG. GLP-1 receptor activated insulin secretion from pancreatic  $\beta$ -cells: mechanism and glucose dependence. *Diabetes ObesMetab*. 2013 Jan;15(1):15-27.
20. Kooij KL, Koster DI, Eeltink E, Luijendijk M, Drost L, Ducrocq F, Adan RAH. GLP-1 receptor agonist semaglutide reduces appetite while increasing dopamine reward signaling. *Neurosci Appl*. 2023 Nov 22;3:103925
21. Haufe S, Haas V, Utz W, Birkenfeld AL, Jeran S, Böhnke J, Mähler A, Luft FC, Schulz-Menger J, Boschmann M, Jordan J, Engeli S. Long-lasting improvements in liver fat and metabolism despite body weight regain after dietary weight loss. *Diabetes Care*. 2013 Nov;36(11):3786-92.
22. Greenway FL. Physiological adaptations to weight loss and factors favouring weight regain. *Int J Obes (Lond)*. 2015 Aug;39(8):1188-96.
23. Enebo LB, Berthelsen KK, Kankam M, Lund MT, Rubino DM, Satyrganova A, Lau DCW. Safety, tolerability, pharmacokinetics, and pharmacodynamics of concomitant administration of multiple doses of cagrilintide with semaglutide 2.4 mg for weight management: a randomised, controlled, phase 1b trial. *Lancet*. 2021 May 8;397(10286):1736-1748.
24. Min JS, Jo SJ, Lee S, Kim DY, Kim DH, Lee CB, Bae SK. A Comprehensive Review on the Pharmacokinetics and Drug-Drug Interactions of Approved GLP-1 Receptor Agonists and a Dual GLP-1/GIP Receptor Agonist. *Drug Des DevelTher*. 2025 Apr 30;19:3509-3537.
25. Vardanyan GS, Harutyunyan HS, Aghajanov MI, Vardanyan RS. Neurochemical regulators of food behavior for pharmacological treatment of obesity: current status and future prospects. *Future Med Chem*. 2020 Oct;12(20):1865-1884
26. Heck AM, Yanovski JA, Calis KA. Orlistat, a new lipase inhibitor for the management of obesity. *Pharmacotherapy*. 2000 Mar;20(3):270-9.
27. Wang JY, Wang QW, Yang XY, Yang W, Li DR, Jin JY, Zhang HC, Zhang XF. GLP-1

- receptor agonists for the treatment of obesity: Role as a promising approach. *Front Endocrinol (Lausanne)*. 2023 Feb 1;14:1085799
28. Hoffmann K, Michalak M, Rizzo M, Maggio V, Paczkowska A. The efficacy and safety of dual GIP/GLP1 receptor agonists (tirzepatide) in diabetes and obesity: a systematic review and network meta-analysis. *Expert Opin Drug Saf*. 2025 Nov 11:1-16.
29. Dehestani B, Stratford NR, le Roux CW. Amylin as a Future Obesity Treatment. *J ObesMetabSyndr*. 2021 Dec 30;30(4):320-325.
30. Rebello CJ, Greenway FL. Reward-Induced Eating: Therapeutic Approaches to Addressing Food Cravings. *AdvTher*. 2016 Nov;33(11):1853-1866. doi: 10.1007/s12325-016-0414-6.
31. Higgs S, Cooper AJ, Barnes NM. The 5-HT<sub>2C</sub> receptor agonist, lorcaserin, and the 5-HT<sub>6</sub> receptor antagonist, SB-742457, promote satiety; a microstructural analysis of feeding behaviour. *Psychopharmacology (Berl)*. 2016 Feb;233(3):417-24.
32. Pereira MJ, Eriksson JW. Emerging Role of SGLT-2 Inhibitors for the Treatment of Obesity. *Drugs*. 2019 Feb;79(3):219-230.
33. Yerevanian A, Soukas AA. Metformin: Mechanisms in Human Obesity and Weight Loss. *CurrObes Rep*. 2019 Jun;8(2):156-164
34. Lau DCW, Erichsen L, Francisco AM, Satylganova A, le Roux CW, McGowan B, et al. Once-weekly cagrilintide for weight management in people with overweight and obesity: A multicentre, randomised, double-blind, placebo-controlled and active-controlled, dose-finding phase 2 trial. *Lancet*. 2021;398:2160-72
35. Enebo LB, Berthelsen KK, Kankam M, Lund MT, Rubino DM, Satylganova A, et al. Safety, tolerability, pharmacokinetics, and pharmacodynamics of concomitant administration of multiple doses of cagrilintide with semaglutide 2.4 mg for weight management: A randomised, controlled, phase 1b trial. *Lancet*. 2021;397:1736-48
36. Hoffmann K, Michalak M, Paczkowska A. Relative Effectiveness and Safety of the GLP-1 (Glucagon-Like Peptide 1) Receptor Agonists, Semaglutide and Liraglutide in the Treatment of Obese Type 2 Diabetics: A Prospective Observational Cohort Study in Poland. *Diabetes MetabSyndrObes*. 2025 Aug 7;18:2723-2738.
37. Aronne LJ, Horn DB, le Roux CW, Ho W, Falcon BL, Gomez Valderas E, Das S, Lee CJ, Glass LC, Senyucel C, Dunn JP; SURMOUNT-5 Trial Investigators. Tirzepatide as Compared with Semaglutide for the Treatment of Obesity. *N Engl J Med*. 2025 Jul 3;393(1):26-36.
38. IskandarIdris. Coadministration of the long-acting amylin analog cagrilintide plus semaglutide (CagriSema), resulted in significantly greater weight loss, along with improved measures of glucose control, in a short phase 2 trial of patients with type 2 diabetes. *Diabetes ObesMetab*. 2023;1:e68
39. Shirai K, Fujita T, Tanaka M, Fujii Y, Shimomasuda M, Sakai S, Samukawa Y. Efficacy and Safety of Lipase Inhibitor Orlistat in Japanese with Excessive Visceral Fat Accumulation: 24-Week, Double-Blind, Randomized, Placebo-Controlled Study. *AdvTher*. 2019 Jan;36(1):86-100.
40. Lei XG, Ruan JQ, Lai C, Sun Z, Yang X. Efficacy and Safety of Phentermine/Topiramate in Adults with Overweight or Obesity: A Systematic Review and Meta-Analysis. *Obesity (Silver Spring)*. 2021 Jun;29(6):985-994.
41. Frias JP, Deenadayalan S, Erichsen L, Knop FK, Lingvay I, Macura S, et al. Efficacy and safety of co-administered once-weekly cagrilintide 2.4 mg with once-weekly semaglutide 2.4 mg in type 2 diabetes: A multicentre, randomised, double-blind, active-controlled, phase 2 trial. *Lancet*. 2023;402:720-30. doi: 10.1016/S0140-6736(23)01163-7
42. Jense M, Jense MTF, Knibbeler L, Hoogma RPLM, Palm-Meinders IH, Greve JWM, Boerma EG. The Effectivity and Safety of Naltrexone/Bupropion in Patients Suffering from Overweight and Obesity in a Real-World Setting. *Obes Facts*. 2025;18(5):481-488.
43. Fredrick TW, Camilleri M, Acosta A. Pharmacotherapy for Obesity: Recent

- Updates. ClinPharmacol. 2025 Sep 19;17:305-327
44. Alfaris N, Waldrop S, Johnson V, Boaventura B, Kendrick K, Stanford FC. GLP-1 single, dual, and triple receptor agonists for treating type 2 diabetes and obesity: a narrative review. EClinicalMedicine. 2024 Aug 30;75:102782
  45. Frias JP, Deenadayalan S, Erichsen L, Knop FK, Lingvay I, Macura S, Mathieu C, Pedersen SD, Davies M. Efficacy and safety of co-administered once-weekly cagrilintide 2·4 mg with once-weekly semaglutide 2·4 mg in type 2 diabetes: a multicentre, randomised, double-blind, active-controlled, phase 2 trial. Lancet. 2023 Aug 26;402(10403):720-730
  46. Wang, Yuxin&Feng, Zhien& Yu, Lexiang. (2025). The next frontier in metabolic health: Cagrilintide-Semaglutide and the evolving landscape of therapies. The Innovation Medicine. 100150. 10.
  47. Davies MJ, Bajaj HS, Broholm C, Eliassen A, Garvey WT, le Roux CW, Lingvay I, Lyndgaard CB, Rosenstock J, Pedersen SD; REDEFINE 2 Study Group. Cagrilintide-Semaglutide in Adults with Overweight or Obesity and Type 2 Diabetes. N Engl J Med. 2025 Aug 14;393(7):648-659
  48. Xue Y, Zou H, Ruan Z, Chen X, Lai Y, Yao D, Ung COL, Hu H. Pharmacoeconomic evaluation of anti-obesity drugs for chronic weight management: a systematic review of literature. Front Endocrinol (Lausanne). 2023 Nov 6;14:1254398.

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How to cite this article:

Parisapogu Rahul, Parsi Rinky Rathna Prabha, Koppuravuri Harshitha Manasa, Batnasaileela Prasad, Pavan Karthik, Sai Harshitha lakamsani, Padma Taruni Mamidisetti, Sagi Anil Kumar. (2025). A review on Cagrisema vs Existing treatments in treatment of weight loss. Int. J. Curr. Res. Med. Sci. 11(12): 1-16.

DOI: <http://dx.doi.org/10.22192/ijcrms.2025.11.12.001>