

The role of novel combinations

Fact sheet for obesity with or without type 2 diabetes For more information, visit: www.touchENDOCRINOLOGY.com

Rationale for GLP-1-based combination strategies

Targeting multiple hormonal pathways at once could lead to greater efficacy¹

Potential for increased therapeutic efficacy by opposing compensatory mechanisms in our natural human biology that defend against weight loss¹

Potential to use lower doses of each treatment in the combination to minimize risk of side effects¹

Combination of amylin analogues and GLP-1RAs may induce synergistic weight loss effect²

Using amylin analogues in obesity



Amylin affects both homeostatic and reward-related aspects of feeding³



Amylin is a target for weight loss and improvement in blood glucose⁴



Cagrilintide can be given once-weekly⁵



Cagrilintide is associated with fewer GI side effects than GLP-1RAs⁶



Pramlintide, the only currently approved amylin analogue, must be taken with every meal^{2,7}



Amylin analogues are administered by injection and some patients may be reluctant to consider injections^{2,5,7}

Phase II trial investigating ascending doses of cagrilintide for weight management in patients without diabetes⁵



BMI ≥30 kg/m² or ≥27 kg/m² with hypertension or dyslipidaemia (N=706)



Cagrilintide (0.3–4.5 mg) vs liraglutide 3.0 mg and placebo

Weight loss vs liraglutide

• Greater with 4.5 mg cagrilintide vs 3.0 mg liraglutide (-10.8% vs -9.0%; p=0.03)

Changes comparable with cagrilintide and liraglutide for

- Reductions in triglycerides and VLDL cholesterol*
- Improvement in TFEQ-R18 scores
- Proportion of patients with AEs



Phase II clinical trial data for CagriSema in patients with type 2 diabetes⁸



2 August-18 October 2021



CagriSema: n=31; semaglutide: n=31; cagrilintide: n=30



Change in HbA1c:

Significantly greater reduction from baseline to week 32 with CagriSema vs cagrilintide (p<0.001)



Mean change in body weight at week 32:



CagriSema: -15.6% (-16.3 kg)

Semaglutide: -5.1% (-5.3 kg)

Cagrilintide: -8.1% (-8.4 kg)



Achieved target HbA1c:

A greater proportion of patients reached target HbA1c (<7.0% and ≤6.5%) with CagriSema vs cagrilintide

or semaglutide



Clinically significant or severe hypoglycaemic episodes:

n=0



Change in fasting plasma glucose from baseline:

CagriSema: -3.3 mmol/L

Semaglutide: -2.5 mmol/L

Cagrilintide: -1.7 mmol/L



Discontinued treatment:

CagriSema: n=4 (due to AEs n=0)

Semaglutide: n=3 (due to AEs n=1)

Cagrilintide: n=0





CagriSema: 68%

Semaglutide: 71%

Cagrilintide: 80%



GI adverse events:*

CagriSema: 58%

Semaglutide: 32%

Cagrilintide: 33%

All mild or moderate in severity and the majority began during dose escalation



Serious adverse events:

CagriSema: n=0

Semaglutide: n=2

Cagrilintide: n=4



*Including nausea, constipation, diarrhoea, vomiting and GORD.



GLP-1-based combination treatments under investigation in obesity with T2D9

GLP-1—based combination treatments under investigation in obesity with 12D								
	CagriSema in patients with T2D							
Phase (%)	II (NCT04982575)	III; REDEFINE 2 (NCT05394519)	III; REIMAGINE 1 (NCT06323174)	III; REIMAGINE 2 (NCT06065540)	III; REIMAGINE 3 (NCT06323161)			
Estimated primary completion	COMPLETED	December 2024	October 2025	November 2025	September 2025			
Treatment arms	 CagriSema Cagrilintide + placebo Placebo + semaglutide 	 CagriSema Placebo 	 CagriSema Placebo 	 CagriSema Cagrilintide Semaglutide Placebo 	 CagriSema Placebo 			
Patient criteria	 T2D for ≥180 days ≥18 years of age BMI ≥27.0 kg/m² 	 T2D for ≥180 days ≥18 years of age BMI ≥27.0 kg/m² 	 T2D for ≥30 days ≥18 years of age BMI ≥23.0 kg/m² 	 T2D for ≥180 days ≥18 years of age BMI ≥25 kg/m² 	 T2D for ≥180 days ≥18 years of age BMI ≥25 kg/m² 			
Primary endpoint	• Change in HbA1c	 Relative change in body weight (%) from baseline Achievement of ≥5% weight reduction from baseline 	Change in HbA1c	Change in HbA1cRelative change in body weight	Change in HbA1c			
Key safety endpoints	 Number of TEAEs Number of clinically significant or severe hypoglycaemic episodes 	 Number of TEAEs and TESAEs Number of clinically significant or severe hypoglycaemic episodes 	 Number of TEAEs Number of clinically significant or severe hypoglycaemic episodes 	 Number of TEAEs Number of clinically significant or severe hypoglycaemic episodes 	 Number of TEAEs Number of clinically significant or severe hypoglycaemic episodes 			

'CagriSema' refers to co-administered semaglutide with cagrilintide.

Information on clinical trials found at clinicaltrials.gov by searching the NCT number.

GLP-1-based combination treatments under investigation in obesity with or without T2D9

Phase II (NCT06603571)	III; REDEFINE 3 (NCT05669755)	III; NCT05813925	III. DEDECIME 1	
		Study in East Asia	III; REDEFINE 1 (NCT05567796)	III; REDEFINE 4 (NCT06131437)
Estimated primary June 2026	September 2027	January 2025	October 2024 (actual primary completion date)	August 2025
Treatment arms 1. Eloralintide 2. Eloralintide + tirzepatide 3. Tirzepatide 4. Placebo	 CagriSema Placebo 	 CagriSema Semaglutide + placebo 	 CagriSema Cagrilintide or semaglutide + placebo Placebo 	 CagriSema Tirzepatide
• T2D • 18–75 years of age • BMI ≥27.0 kg/m²	 ≥55 years of age BMI ≥25.0 kg/m2 Established CVD* ±T2D 	 ≥18 years of age BMI ≥27.0 kg/m² with ≥2 obesity-related complications[‡] or BMI ≥35.0 kg/m² with ≥1 obesity-related complications[‡] ±T2D 	 ≥18 years of age BMI ≥30.0 kg/m² No history of T2D or T1D 	 ≥18 years of age BMI ≥30.0 kg/m2 No history of T2D or T1D
• % change in body weight from baseline	 Time to first MACE[†] Number of TESAEs 	Relative change in body weight	 Relative change in body weight (%) from baseline Achievement of ≥5% weight reduction 	Relative change in body weight
*No safety endpoints listed 'CagriSema' refers to co-administered semaglutide with	 Number of severe hypoglycaemic episodes Number of EAC- confirmed neoplasms 	Number of TEAEs and TESAEs	from baseline • Number of TEAEs and TESAEs	Number of TEAEs and SAEs

*As evidenced by ≥1 of prior MI, prior stroke, symptomatic peripheral arterial disease; †consisting of CV death, non-fatal MI, non-fatal stroke; ‡≥1 complication should be hypertension, dyslipidaemia or T2D.



Abbreviations and references

Abbreviations

AE, adverse event; BMI, body mass index; CV, cardiovascular; CVD, CV disease; EAC, event adjudication committee; GI, gastrointestinal; GLP-1, glucagon-like peptide-1; GLP-1RA, GLP-1 receptor agonist; GORD, gastro-oesophageal reflux disease; HbA1c, glycated haemoglobin; MACE, major adverse cardiovascular events; MI, myocardial infarction; SAE, serious AE; T1D, type 1 diabetes; T2D, type 2 diabetes; TEAE, treatment emergent AE; TESAE, treatment emergent SAE; TFEQ-R18, three factor eating questionnaire-R18; VLDL, very low-density lipoprotein.

References

- 1. Coutinho W, Halpern B. *Diabetol Metab Syndr*. 2024;16:6.
- 2. Melson E, et al. Int J Obes. 2024; doi.org/10.1038/s41366-024-01473-y.
- 3. Angeliki AM, et al. *Endocr Rev.* 2022;43:507–57.
- 4. Dehestani R, et al. J Obes Metab Syndr. 2021;30:320–5.
- 5. Lau DCW. Lancet. 2021;398:2160-72.
- 6. Dutta D, et al. Indian J Endocrinol Metab. 2024;28:436–44.
- 7. FDA. Pramlintide PI. Available at: www.accessdata.fda.gov/drugsatfda_docs/label/2019/021332s028lbl.pdf (accessed 14 February 2024).
- 8. Frias JP, et al. *Lancet*. 2023;402:720–30.
- 9. Clinicaltrials.gov. Available at https://clinicaltrials.gov/ (accessed 10 January 2025).

The guidance provided by this practice aid is not intended to directly influence patient care. Clinicians should always evaluate their patients' conditions and potential contraindications and review any relevant manufacturer product information or recommendations of other authorities prior to consideration of procedures, medications, or other courses of diagnosis or therapy included here.

Our practice aid coverage does not constitute implied endorsement of any product(s) or use(s). touchENDOCRINOLOGY cannot guarantee the accuracy, adequacy or completeness of any information, and cannot be held responsible for any errors or omissions.

