STRUCTURE THERAPEUTICS

Amylin Development Candidate ACCG-2671

December 17, 2024

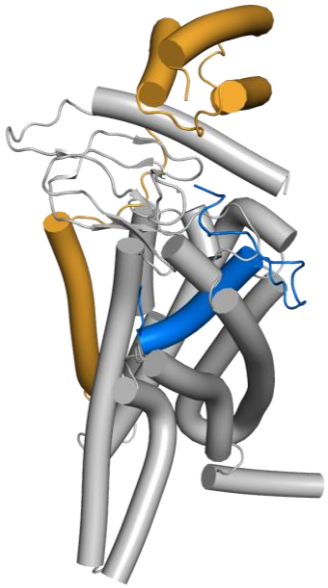
Forward looking statements

This presentation contains “forward-looking statements” within the meaning of the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact are statements that could be deemed forward-looking statements, including, without limitation, statements concerning the Company's future plans and prospects; any expectations regarding the safety, efficacy, tolerability, scalability and combinability of ACCG-2671, GSBR-1290 and other candidates under development, the ability of ACCG-2671 and GSBR-1290 to treat obesity, T2DM, or related indications; the potential market opportunities; the timing and clinical strategy for ACCG-2671; the ability of the Company to expand to additional indications; and the planned timing of the Company's anticipated milestones and data results for its various programs. In addition, when or if used in this presentation, the words “may,” “could,” “should,” “anticipate,” “believe,” “estimate,” “expect,” “intend,” “plan,” “predict” and similar expressions and their variants, as they relate to the Company may identify forward-looking statements. Forward-looking statements are neither historical facts nor assurances of future performance. Although the Company believes the expectations reflected in such forward-looking statements are reasonable, the Company can give no assurance that such expectations will prove to be correct. Readers are cautioned that actual results, levels of activity, safety, performance or events and circumstances could differ materially from those expressed or implied in the Company’s forward-looking statements due to a variety of risks and uncertainties, which include, without limitation, risks and uncertainties related to the preliminary nature of the results due to length of the study and sample size and results from earlier clinical studies not necessarily being predictive of future results, potential delays in the commencement, enrollment and completion of the Company’s planned and current clinical and current studies, the Company’s ability to advance GSBR-1290, LTSE-2578, ANPA-0073, ACCG-2671 and its other therapeutic candidates, obtain regulatory approval of and ultimately commercialize the Company’s therapeutic candidates, competitive products or approaches limiting the commercial value of the Company’s product candidates, the timing and results of preclinical and clinical studies, the Company’s ability to fund development activities and achieve development goals, the Company's reliance on third parties, including clinical research organizations , manufacturers, suppliers and collaborators, over which it may not always have full control, the impact of any global pandemics, inflation, supply chain issues, rising interest rates, future bank failures and other macroeconomic factors on the Company’s business, its ability to protect its intellectual property and other risks and uncertainties described in the Company’s filings with the Securities and Exchange Commission (SEC), including the Company’s Annual Report on Form 10-K for the year ended December 31, 2023 filed with the SEC on March 8, 2024, Quarterly Report on Form 10-Q for the quarter ended September 30, 2024 filed with the SEC on November 13, 2024, and future reports the Company may file with the SEC from time to time. All forward-looking statements contained in this presentation speak only as of the date on which they were made and are based on management’s assumptions and estimates as of such date. The Company undertakes no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they were made, except as required by law.

Agenda

Opening Remarks • Technology Platform and Discovery of Small Molecule Amylin Receptor Agonist	**Raymond Stevens, Ph.D.** *Chief Executive Officer*
Amylin Receptor Agonist Program • Amylin Biology • ACCG-2671 Development Candidate Profile	**Fang Zhang, Ph.D.** *EVP, Head of Biology*
Building a Leading Oral Small Molecule Portfolio • Combination therapy approach	**Raymond Stevens, Ph.D.** *CEO*
Q&A	**Raymond Stevens, Ph.D.**, *CEO* **Blai Coll, M.D., Ph.D.**, *CMO* **Xichen Lin, Ph.D.**, *CSO* **Fang Zhang, Ph.D.**, *EVP, Head of Biology* **Jun Yoon**, *CFO*

Mission: Bring Small Molecule Innovation to Areas of Great Unmet Need

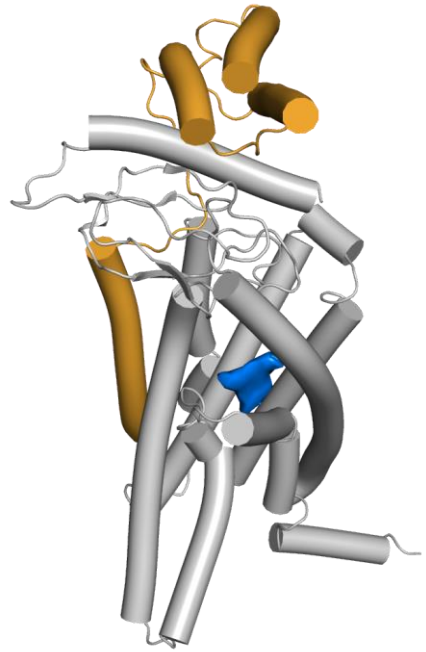


Amylin Receptor Agonist PEPTIDE

MEDICINES ACCESSIBLE FOR ALL

Oral Small Molecule Opportunities

- Broader accessibility
- Oral formulation provides more patient options
- Potential for long-term weight loss maintenance
- Large-scale manufacturing; lower cost of goods
- Potential fixed dose combination advantages



Amylin Receptor Agonist SMALL MOLECULE

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Disrupting the GLP-1R Peptide-Dominated Market with Oral Small Molecules

Peptide Drugs on the Market	Byetta (exenatide) injection; Victoza liraglutide injection	Saxenda liraglutide injection 3mg; trulicity dulaglutide injection	Ozempic semaglutide injection	Rybelsus semaglutide tablets	wegovy semaglutide injection	Now approved once weekly mounjaro (tirzepatide) injection
	GLP-1R					GLP-1R/GIPR
Approval:	2005/2010	2014	2017	2019	2021	2022

Incretin drugs evolution – Aimed at improving convenience & efficacy for patients

Our Small Molecule Incretin Franchise

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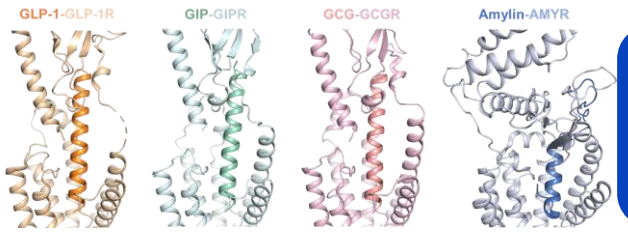


GLP-1R
GSBR-1290
Phase 2b

Amylin
ACCG-2671
Development Candidate

GLP-1R + Amylin
GLP-1R + Incretin
Amylin + Incretin
Combination

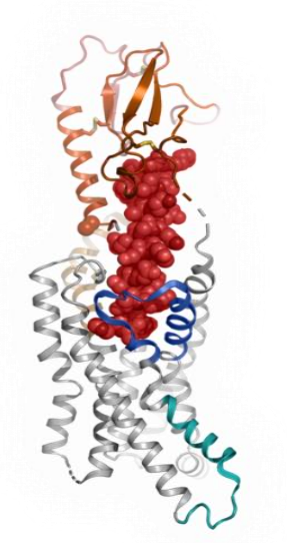
GLP-1R/GIPR
GLP-1R/GCGR
GLP-1R/GIPR/GCGR
Dual, Triple Agonist Molecule Hit Identification

Our powerful platform enables
a franchise approach to potentially complement and replace the marketed peptides

Cutting Edge Computational + Technology Platform

Integrating GPCR Dynamics for Structure-Based Drug Design

- Intrinsic dynamic conformations provide additional structure-function insight
- Ligand binding site flexibility enables molecule design for novel and differentiated properties
- Induced-fit ligand binding dynamics significantly advances structure enablement leading to accelerated hit and lead discovery



Validated Targets (GPCR + Peptide)

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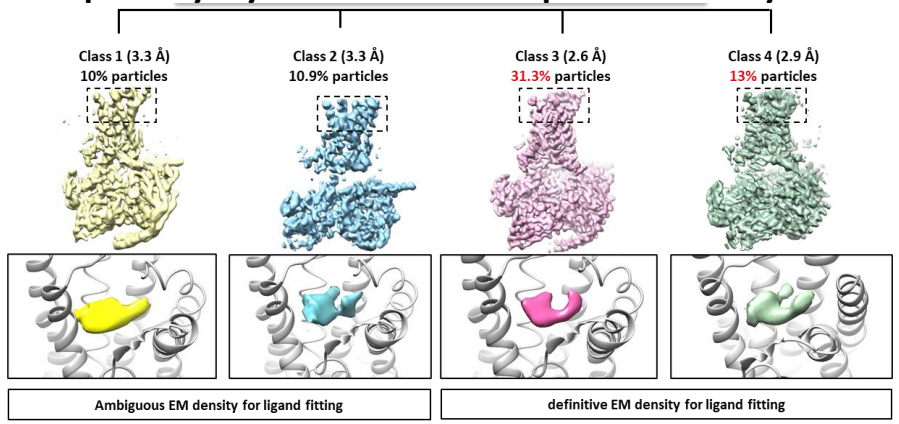
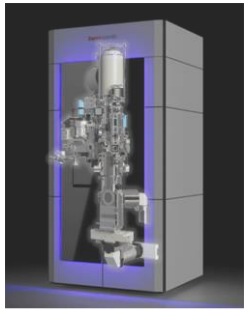
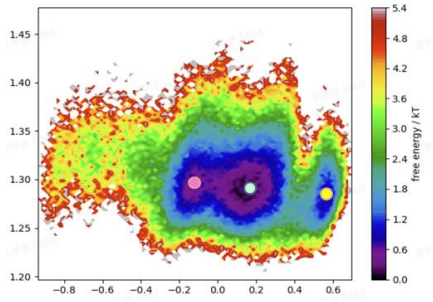
Proprietary cryo-EM workflow captures GPCR dynamics



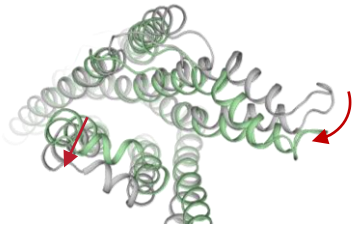
Simulated conformations using molecular dynamics



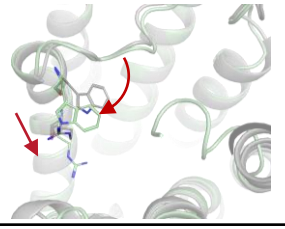


INTEGRATION

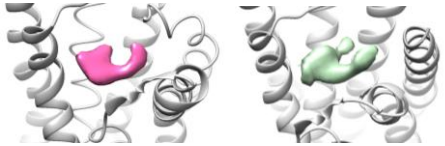
GPCR conformation dynamics



Binding site sidechain dynamics



Ligand binding pose dynamics



ACCG-2671: Oral Small Molecule Amylin Receptor Agonist

	Target Product Profile
Competitive Efficacy	Comparable preclinical efficacy to cagrilintide – a dual amylin calcitonin receptor agonist (DACRA) peptide
Safety	Suitable for chronic disease treatment
Pharmacokinetics	Predicted once daily oral dosing
Scalability	Manufacturable and scalable at low COGS
Combinability	Combinable with small molecule GLP-1RA and other incretins

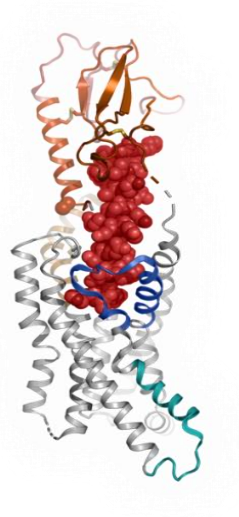
Amylin Receptor Agonist Program

Amylin Biology

ACCG-2671 Development Candidate Profile

Multiple Potential Beneficial Physiological Effects of Amylin and GLP-1

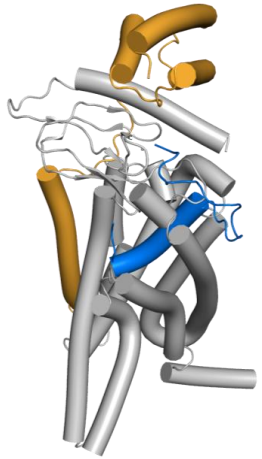
GLP-1



Secreted from L-cells of the small intestine

GLP-1		Amylin
✓ Reduce appetite ✓ Increase satiety	Brain	✓ Reduce appetite ✓ Increase satiety ✓ Increase leptin sensitivity ✓ Increase energy expenditure
✓ Slow gastric emptying	Stomach	✓ Slow gastric emptying
✓ Stimulate insulin secretion ✓ Inhibit glucagon secretion	Pancreas	✓ Inhibit glucagon secretion
✓ Improve insulin sensitivity ✓ Reduce fat accumulation	Liver	✓ Improve insulin sensitivity ✓ Reduce fat accumulation
✓ Reduce fat and related inflammation	White Adipose tissue	✓ Reduce fat and related inflammation
	Muscle tissue	✓ Preserve lean mass

Amylin



Co-secreted with insulin from pancreatic beta cells

References:

1. Mathiesen et al. Eur J Endocrinol 2022;186(6):R93–R111
2. Hey et al. Pharmacol Rev. 2015;67(3):564-600
3. Roth JD, et al. Int J Obes (Lond). 2008;32(8):1201-1210.
4. Mack C, et al. Am J Physiol Regul Integr Comp Physiol. 2007;293(5):R1855-R1863
5. Melson, E., et al. Int J Obes (2024).
6. Baggio LL, Mol Metab. 2021;46:101090.
7. Wilding JPH, et al. N Engl J Med. 2021;384(11):989-1002.

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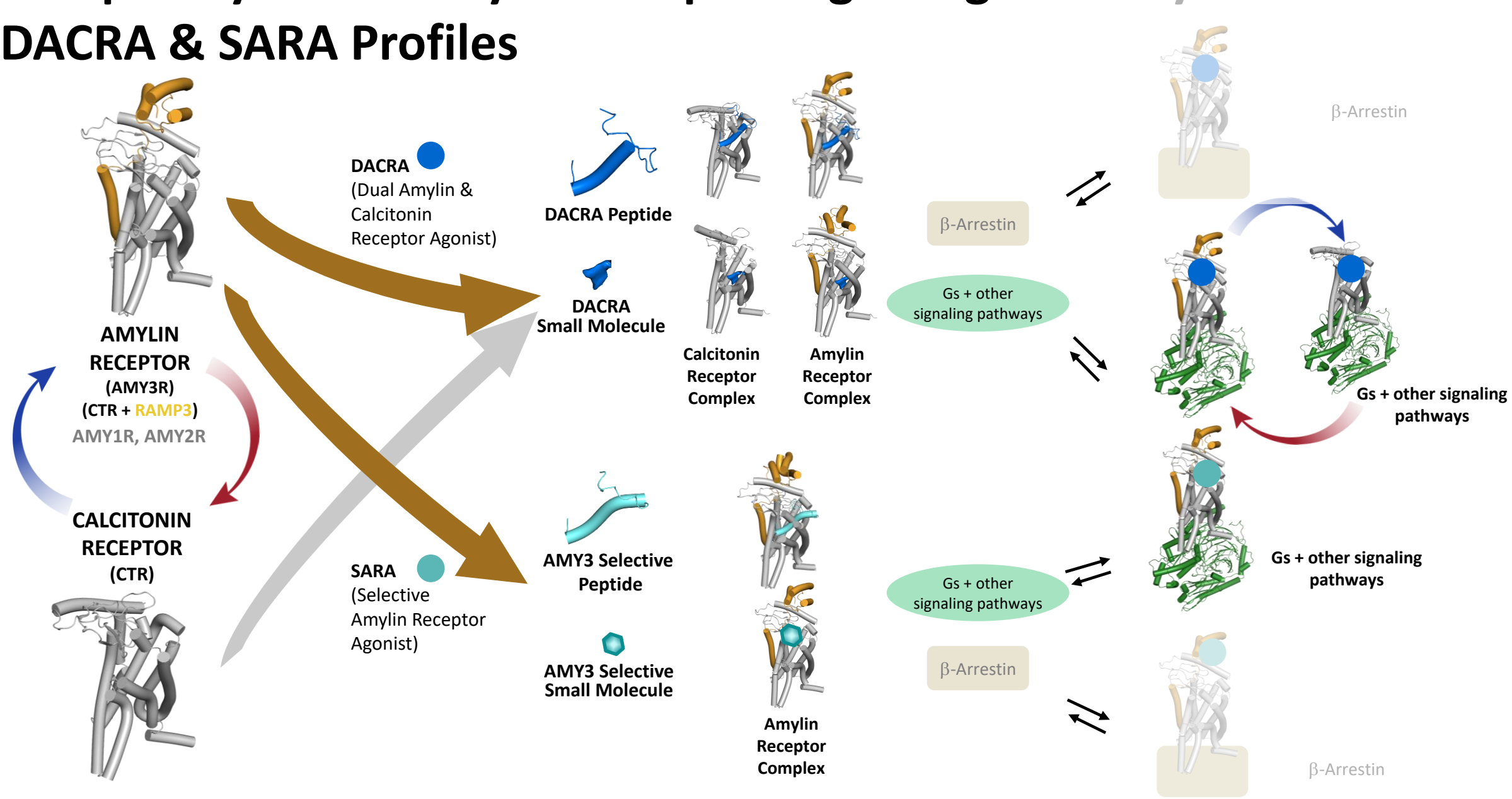
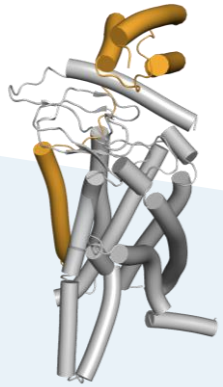
Complexity of the Amylin Receptor Signaling Pathway: DACRA & SARA Profiles



Evidence for ligand-dependent and independent equilibration of RAMP bound forms of CTR based on Gostynska et. al 2024. https://www.biorxiv.org/content/10.1101/2024.10.09.617487v1

G-proteins activated for CTR.AMYRs based on: Fletcher (2021) doi:10.1124/jpet.121.000567

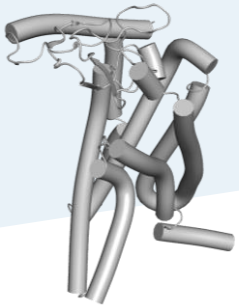
Our Structure-Based Drug Discovery Approach to Generate Multiple Small Molecule Candidates for Optimal Therapeutic Benefit



AMYLIN RECEPTOR (AMY3R)

(CTR + RAMP3)
AMY1R, AMY2R

CALCITONIN RECEPTOR (CTR)



Agonist

DACRA
(Dual Amylin and Calcitonin Receptor Agonist)

SARA
(Selective Amylin Receptor Agonist)

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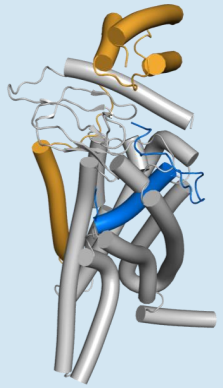
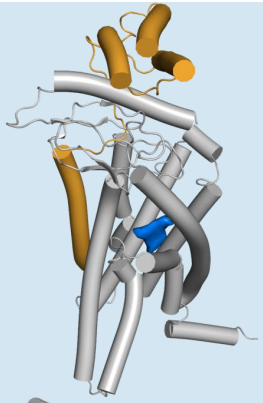
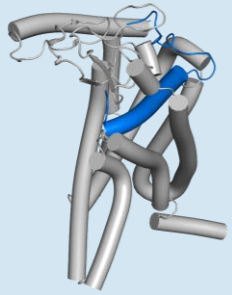
Structure Based Drug Discovery



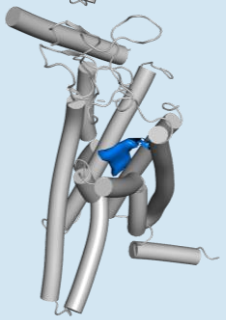
AMY3R DACRA Peptide



AMY3R DACRA Small Molecule



CTR DACRA Peptide



CTR DACRA Small Molecule

Cryo-EM structures of small molecule/ peptide bound AMY3R/CTR

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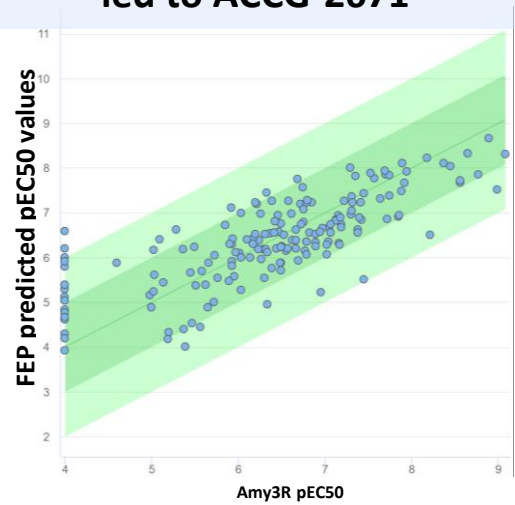
Multiple Small Molecule Candidates

Predictive FEP+ and ML models led to ACCG-2671



Schrödinger Partnership

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Evidence for ligand-dependent and independent equilibration of RAMP bound forms of CTR based on Gostynska et. al 2024. https://www.biorxiv.org/content/10.1101/2024.10.09.617487v1

FEP – free energy perturbation
ML – machine learning

ACCG-2671 Preclinical Results Support Development Candidate Selection

		novo nordisk	STRUCTURE THERAPEUTICS
		Injectable Peptide **Cagrilintide**	**Oral Small Molecule** **ACCG-2671**
In vitro affinity	**K_i hAMY3R**	3.5 nM	**<5 nM**
	K_i hCTR	6.8 nM	**<5 nM**
In vivo efficacy	**Body Weight Loss (DIO rats)**	11.4% @7.5nmol/kg s.c. QD	**14.8% @15 mpk p.o. QD**
Preclinical Safety	**In vivo**	N/A	**Tolerability up to 300 mpk in rat dose range finding**
	In vitro	N/A	**hERG (>100x) GSH Negative**
Human Dose	**Dose & Frequency**	2.4 mg s.c. / QW	**Predicted <100 mg / QD**

Note: The in-house data included here are based on preclinical studies conducted by the Company except for human dose. In vivo efficacy data are based on separate preclinical DIO studies of cagrilintide and ACCG-2671
GSH: Glutathione trapping liver microsomes assay; hERG: human ether-a-go-go-related gene potassium channel

ACCG-2671 Development Candidate Profile

- Dual Amylin and Calcitonin Receptor Agonist (DACRA)
- Nanomolar in vitro binding affinity to amylin and calcitonin receptors
- Sub-nanomolar in vitro functional activity on amylin and calcitonin receptors
- In vivo efficacy comparable to cagrilintide DACRA in Diet-Induced Obesity (DIO) models
- Robust efficacy in combination treatment with semaglutide in DIO models
- Preclinical safety profile supports development candidate selection
- Preclinical PK supports once-daily oral dosing in human

ACCG-2671 Demonstrates Sub-nanomolar Potency of DACRA Activity

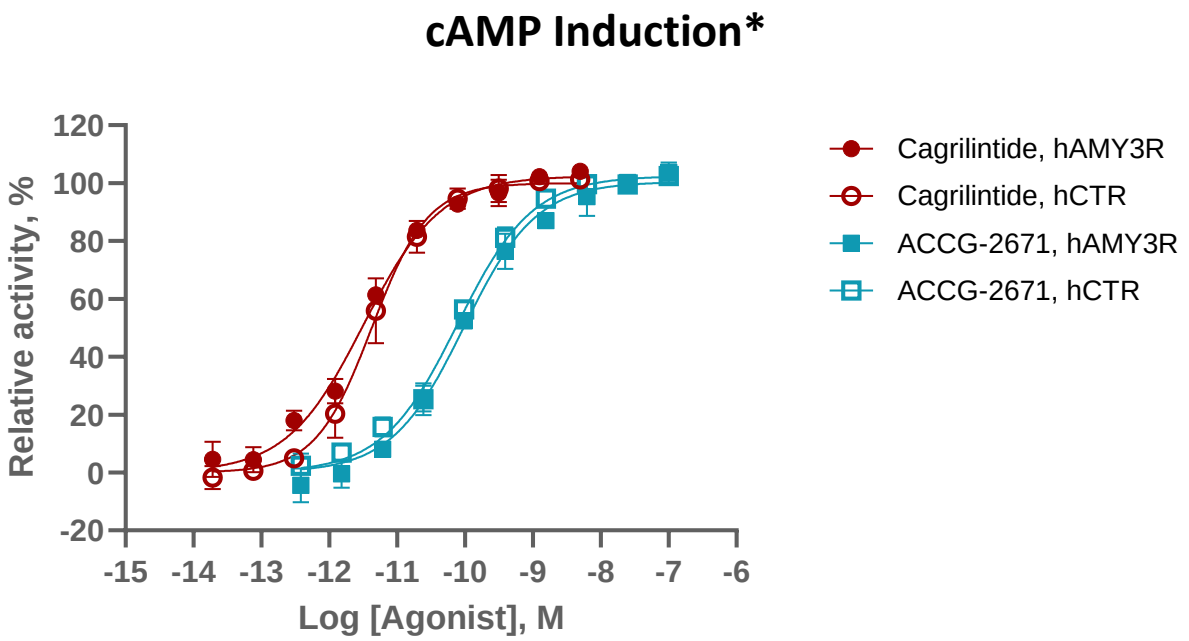
In Vitro Binding Affinity

	Amylin Receptor hAMY3R (K_i, nM)	Calcitonin Receptor hCTR (K_i, nM)
Calcitonin	14.6	1.1
Amylin	0.6	14.8
Cagrilintide	3.5	6.8
ACCG-2671	< 5	< 5

- Nanomolar in vitro binding affinity to amylin and calcitonin receptors

hCTR: human calcitonin receptor; hAMY3R: human amylin 3 receptor;
K_i: inhibitory constant
Calcitonin: human calcitonin; Amylin: rat amylin

In Vitro Functional Activity



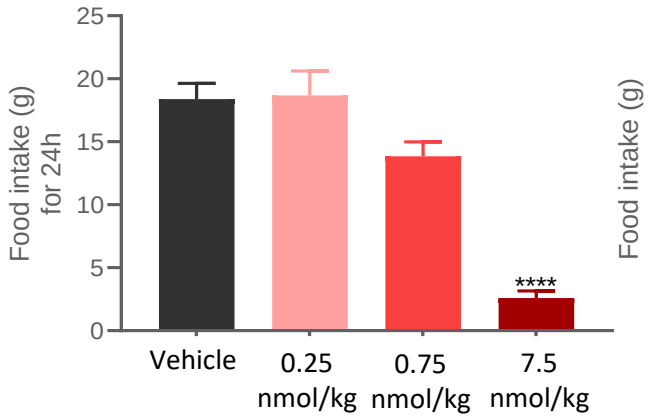
- Sub-nanomolar functional activity and balanced selectivity to amylin and calcitonin receptors

* in vitro potency determined using cAMP induction assays in cell lines overexpressing the indicated receptor. Data are presented as mean ± standard deviation (SD).

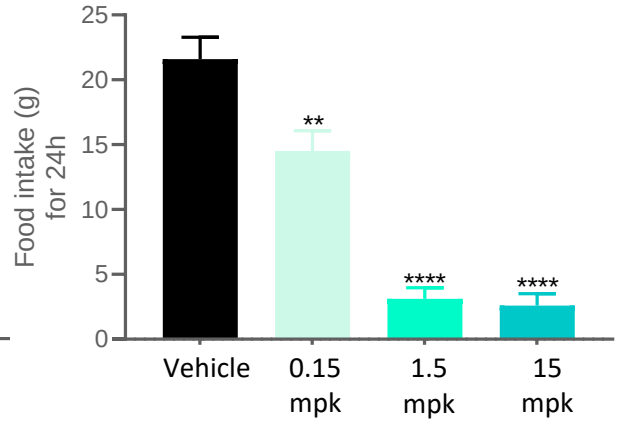
ACCG-2671 Achieves Cagrilintide-like Efficacy in Preclinical DIO Rat Model

Acute Food Intake Reduction

Single s.c. administration



Single oral administration

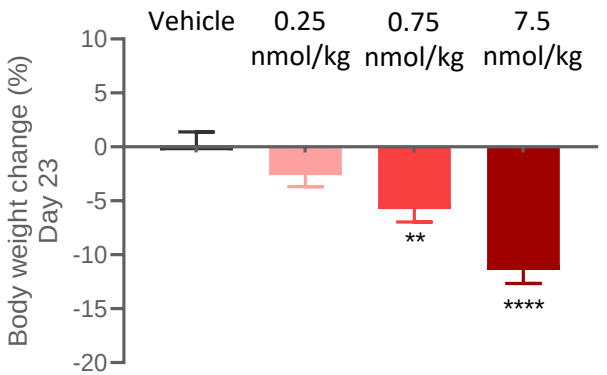


Cagrilintide **ACCG-2671**

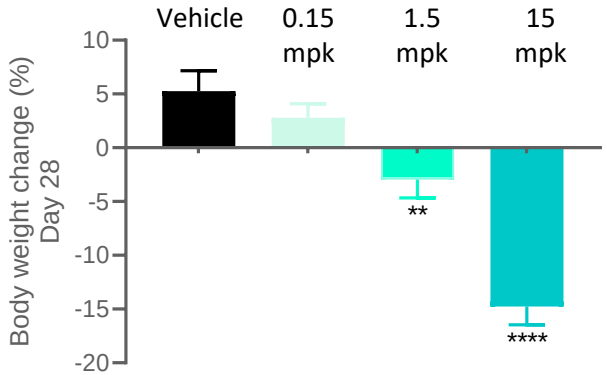
- ACCG-2671 dose dependently reduced food intake in DIO rats

Chronic Body Weight Loss

Repeated s.c. administration



Repeated oral administration



Cagrilintide **ACCG-2671**

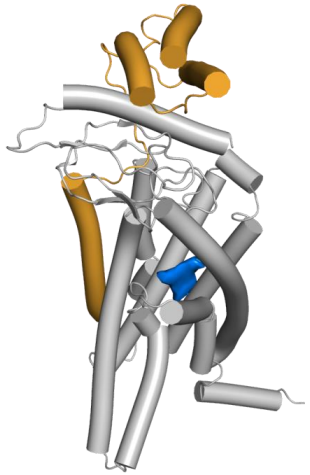
- ACCG-2671 oral daily dosing for 28 days significantly reduced body weight in DIO rats

*p<0.05, **p<0.01, ***p<0.001,****p<0.0001 *vs* Vehicle group by one-way ANOVA test.
Cagrilintide treatment study, N = 6 per group; ACCG-2671 treatment study, N = 7 per group

Note: The in-house data included here is based on a preclinical comparison study of cagrilintide and ACCG-2671 by Company.

Our Oral Small Molecule Amylin Development Candidate

ACCG-2671: Cagrilintide-like efficacy with oral small molecule profile



ACCG-2671 (Oral Amylin)

Most Advanced Small Molecule*

VALIDATED BIOLOGY

- **Promotes satiety** to enhance feelings of fullness, reducing food intake
- **Slows gastric emptying to** delay digestion and absorption for longer periods of satiety
- **Reduces body weight with selective fat loss:** Increases energy expenditure, with lean mass preservation
- **Potential improved tolerability** over GLP-1RA monotherapy
- **Pathway validated** by cagrilintide and CagriSema in multiple late-stage clinical trials

PRECLINICAL PROFILE

- **Potent and balanced in vitro activities** of cAMP induction on AMY3R and CTR
- **Robust in vivo efficacy** in preclinical models with mono- and combination therapy
- PK supports **once-daily oral dosing** in human
- Safety profile supports **chronic treatment**

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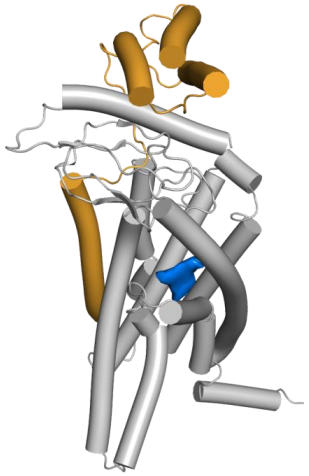
*ACCG-2671 is the first oral small molecule amylin-based development candidate declared.

ACCG-2671 Clinical Development Strategy



ACCG-2671 (Oral Amylin)

Most Advanced Small Molecule*

Q4 2024	1H 2025	2H 2025	1H 2026	2H 2026
✓ First Development Candidate Q4 2024	❑ IND-Enabling Studies ❑ 1 mo and 3 mo GLP-Tox Studies	❑ Phase 1 SAD/MAD Start by YE 2025 ❑ Additional Development Candidates		❑ Phase 1 SAD/MAD Data YE 2026

NEXT STEPS

- **Initiated GMP manufacturing** to support GLP-Tox and early clinical development
- **Longer term tox studies** to enable Phase 2 studies
- **Phase 1 SAD/MAD** to **initiate by year-end 2025**
- **Phase 2** plans include **monotherapy and combination** studies with GLP-1RA for chronic weight management

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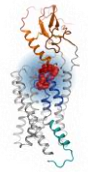
*ACCG-2671 is the first oral small molecule amylin-based development candidate declared.

Building a Leading Oral Small Molecule Portfolio

Combination therapy approach

Two Oral Small Molecule Backbone Mechanisms for the Obesity Market and Beyond

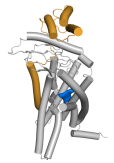


GLP-1R (GSBR-1290)

- Oral small molecule; once-daily dosing
- Monotherapy backbone for chronic maintenance with potential best-in-class efficacy and safety
- Potential fixed-dose combination with other oral non-peptides

Phase 2 program underworay
Top-line data expected in Q4 2025

Amylin (ACCG-2671)



- Oral small molecule; once-daily dosing
- Potential for tolerability advantages
- Lean muscle mass preservation potential
- Potential fixed-dose combination with other oral non-peptides

Development Candidate selected
Phase 1 initiation expected by YE 2025

GLP-1R + Amylin

All Oral Combination

- Potential for greater body weight loss and enhanced tolerability
- Potential broader label expansion into additional clinical indications

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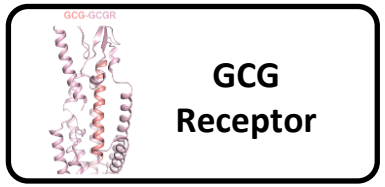
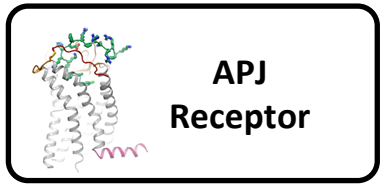
Metabolic Franchise Strategy – Combinations and Potential Indication Expansion

ORAL SMALL MOLECULE METABOLIC FRANCHISE

Other Incretins and Hormones



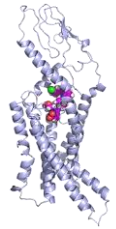
Selective Weight Loss



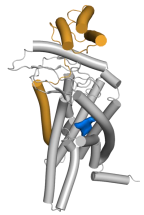
STRUCTURE THERAPEUTICS

Combinations

Oral GLP-1 GSBR-1290



Oral Amylin ACCG-2671



Therapeutic Area

Combination Backbones

POTENTIAL INDICATION OPPORTUNITIES

CKD	MASH	Parkinson's/ Alzheimer's
Obesity	Heart Failure	Sleep Apnea
Type 2 Diabetes	Osteo-arthritis	Addiction

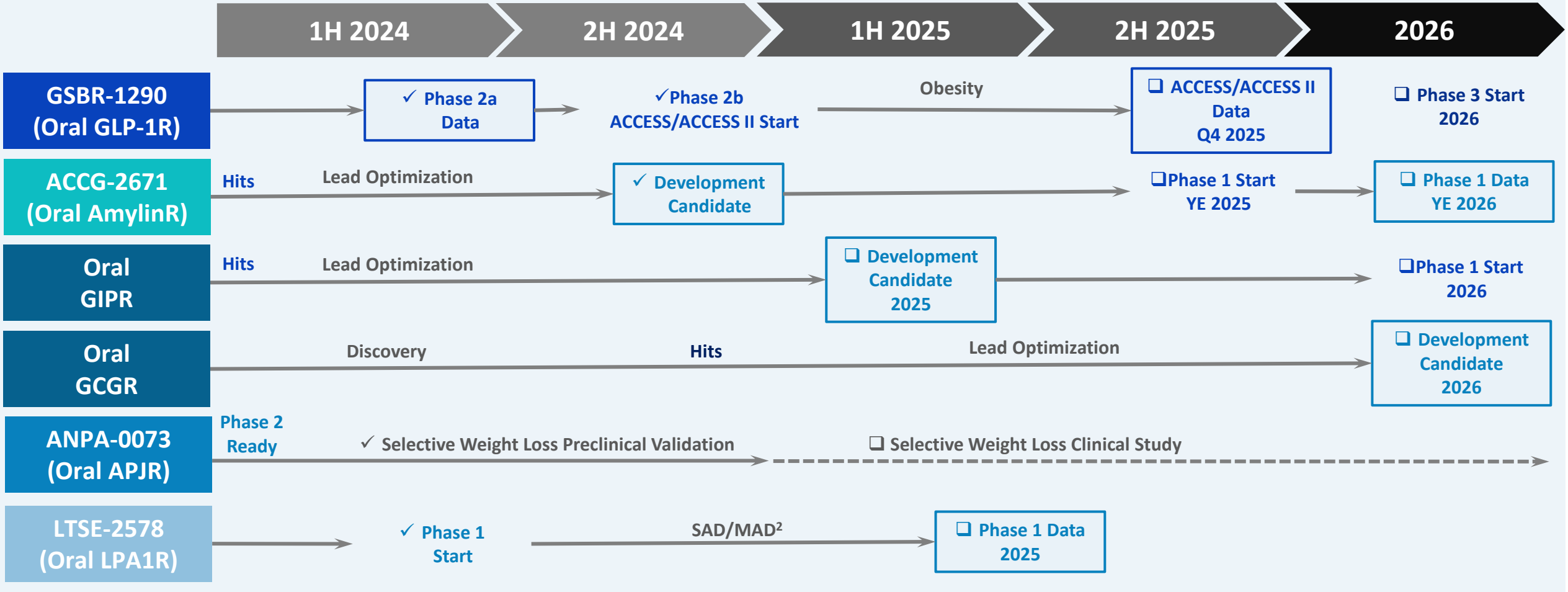
Strong YE 2024 Finish Going into 2025

	Milestones	2024
GSBR-1290	Phase 2a Obesity Data (12 week)	✓
	IND cleared for chronic weight management	✓
	Phase 2b ACCESS and ACCESS II Initiation (36 week)	✓
ACCG-2671	Nominated ACCG-2671 as First Amylin Agonist Development Candidate	✓
ANPA-0073	Initiated 6/9-month GLP-Tox studies	✓
LTSE-2578	Initiated Phase 1 SAD/MAD study	✓
Financing	Raised $547 million Follow On Financing	✓

Robust Portfolio and Multiple Expected Catalysts

~$915.3 M cash[1] as of September 30, 2024

Anticipated Milestones – Entire Small Molecule Portfolio



1. Cash includes cash, cash equivalents and short-term investments
2. Single-ascending dose/Multiple-ascending dose (SAD/MAD)

Thank you

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