

*Our mission at Rani is to end
painful injections for the
millions of patients suffering
from chronic diseases.*

Rani Therapeutics
Corporate Overview

Jan 2026

Rani
THERAPEUTICS

Forward-Looking Statements

This presentation and the accompanying oral statements contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 as contained in Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act. Such forward-looking statements include statements regarding, among other things, our ability to end painful injections for patients suffering from chronic diseases, our ability to achieve oral bioavailability comparable to parenteral products, the potential for the RaniPill to offer better efficacy and convenience than current therapies, the ability of the RaniPill to meet the need for an oral alternative to current injections, the ability of the RaniPill to deliver any biologic in a painless and highly efficient manner, our ability to enable therapies to start earlier with an oral alternative, and our ability to advance our core development pipeline. Forward-looking statements are based on information available at the time those statements are made or on management's good faith beliefs and assumptions as of that time with respect to future events and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in, or suggested by, the forward-looking statements. In light of these risks and uncertainties, the forward-looking events and circumstances discussed in this presentation and the accompanying oral statements may not occur and actual results could differ materially from those anticipated or implied in the forward-looking statements. These risks and uncertainties include Rani Therapeutics Holdings, Inc.'s ("Rani," "we," "us," or "our") future financial performance, including our expectations regarding our revenues, cost of revenues, operating expenses, and our ability to achieve and maintain future profitability, those risks inherent in the preclinical and clinical development process and the regulatory approval process, the risks and uncertainties in commercialization and gaining market acceptance, the commercial potential of oral biologics, our ability to complete development of the RaniPill® HC or any redesign and conduct additional preclinical and clinical studies of the RaniPill HC or any future design of the RaniPill to accommodate higher target payloads, the risks associated with protecting and defending our patents or other proprietary rights, the risk that our proprietary rights may be insufficient to protect our product candidates, the risk that we will be unable to obtain necessary capital when needed on acceptable terms or at all, our ability to enter into strategic partnerships and to achieve the potential benefits of such partnerships, competition from other products or procedures, our reliance on third-parties to conduct our clinical and non-clinical trials, our reliance on single-source third-party suppliers to manufacture clinical, non-clinical and any future commercial supplies of our product candidates, our ability to continue to scale and optimize our manufacturing processes by expanding our use of automation, our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act, our expectations regarding customer demand for our product candidates, increased regulatory requirements and other factors that are set forth in our filings with the Securities and Exchange Commission ("SEC"), including under the caption "Risk Factors" in our Annual Report on Form 10-K and our Quarterly Reports on Form 10-Q, and our other public filings made with the SEC and available at www.sec.gov.

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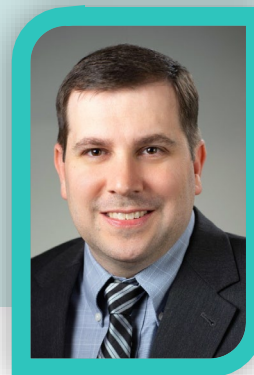
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Bella Vazquez
Sr. Vice President,
Human Resources



Arvinder Dhalla, Ph.D.
Vice President,
Clinical Development



Kyle Horlen
Vice President,
Nonclinical Development

Rani Therapeutics is a public, clinical-stage biotech company developing a platform technology for the oral delivery of biologic drugs.



Our mission at Rani is to end painful injections for the millions of patients suffering from chronic diseases

Rani Therapeutics
NASDAQ: RANI

Clinical-stage biotech focused on Oral Delivery of Biologic Drugs with Bioavailability Comparable to Parenteral Products

TECHNOLOGY:

RaniPill

- 200 μ L Capacity (20-40mgs*)
- Liquid Drug Formulation

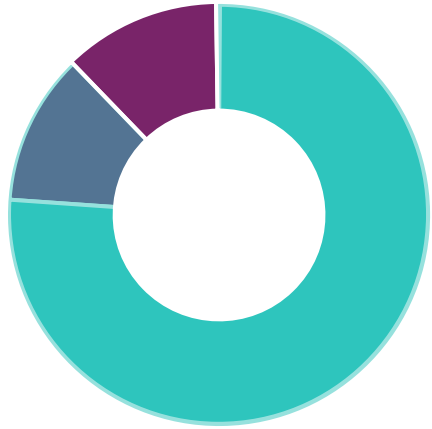
INTERNAL PIPELINE FOCUS:

Obesity, Rare Disease, & Immunology

IP: >400 Granted Patents and Pending Applications, 250 Granted Patents**

Substantial Unmet Need for Oral Administration of Biologics

Patients prefer daily pill over current injection regimen



76% of patients with injection regimen of **every 6 months** ^[1]

88% of patients with injection regimen of **every 2 weeks** ^[2]

Inconvenience impacts treatment adherence



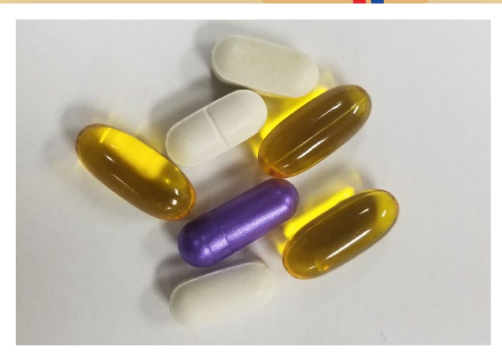
38% of patients who self administer injections said they **frequently skip doses** ^[3]

Therapies could start earlier with an oral alternative



81% of endocrinologists would initiate basal insulin therapy earlier with an oral option ^[3]

Rani is Developing an Oral Delivery Platform to Address this Unmet Need



Rani's Approach

- Designed to deliver any biologic
- Painless, transenteric injection
- Highly efficient route of delivery
- Bioavailability comparable to a subcutaneous injection

Mucosal cell barrier
prevents drug
absorption

Chemical Approach

- Only applicable to small peptides
- Highly inefficient delivery
- Poor bioavailability, typically <1%
- High variability

Demonstrated and Repeated Success

Preclinical

19 Molecules Assessed

antibodies, peptides, and large proteins with high bioavailability

>7,000 Capsules

tested *in vitro* & *in vivo*

60-Day GLP Study

completed with no clinical findings

Clinical

3 Phase 1 Studies*

completed

233 RaniPill Capsules

administered to 146 humans

Repeat Dose Study

completed



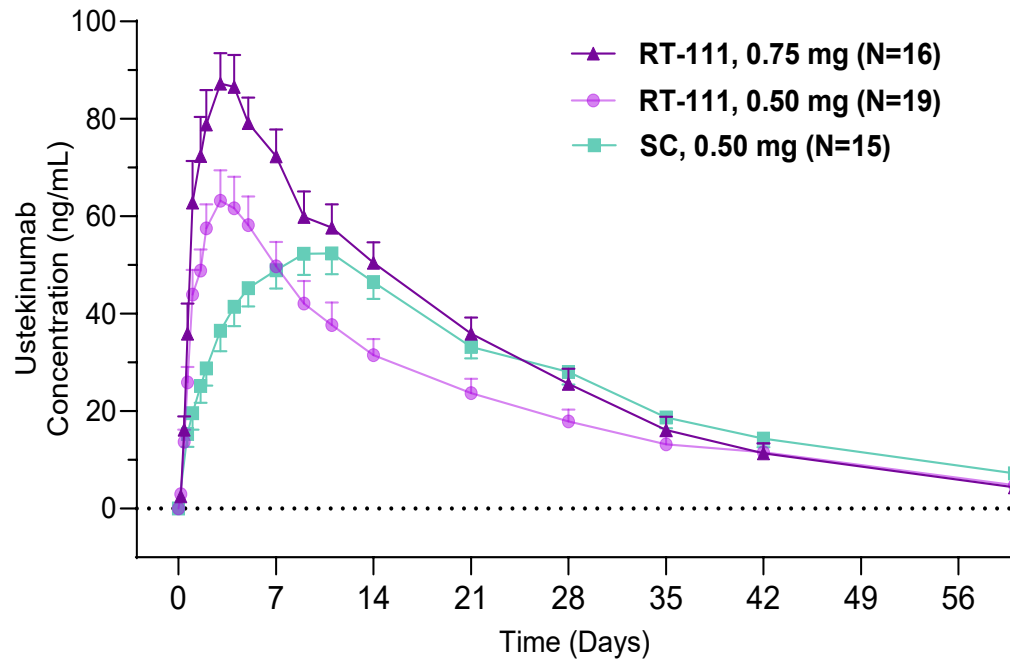
✓ Clinically Tested

✓ Well Tolerated

✓ Broad Applicability

Select PK & PD Data from Clinical and Preclinical Studies Demonstrating Comparable Bioavailability to SC Injection

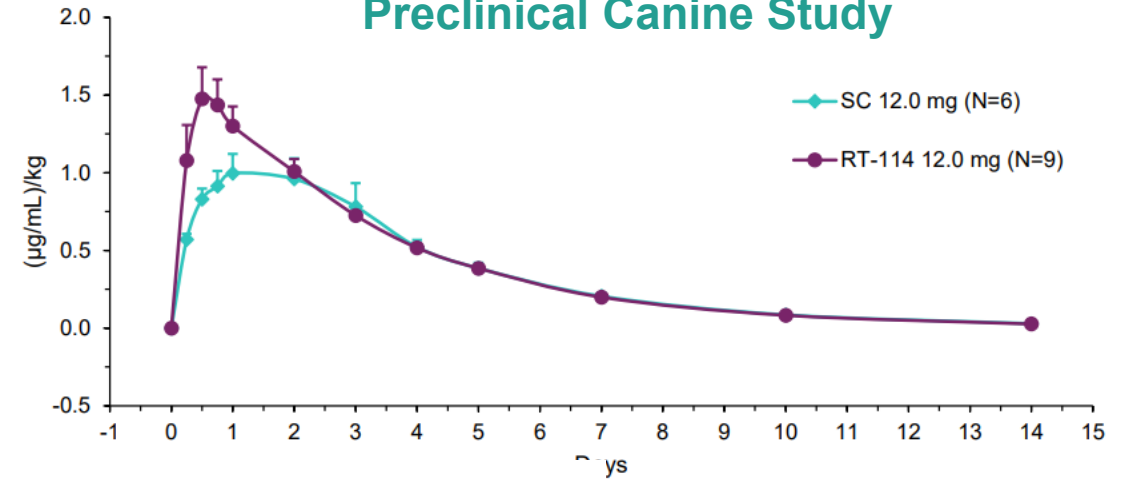
**RT-111 (Oral Ustekinumab)
Phase 1 Clinical Study**



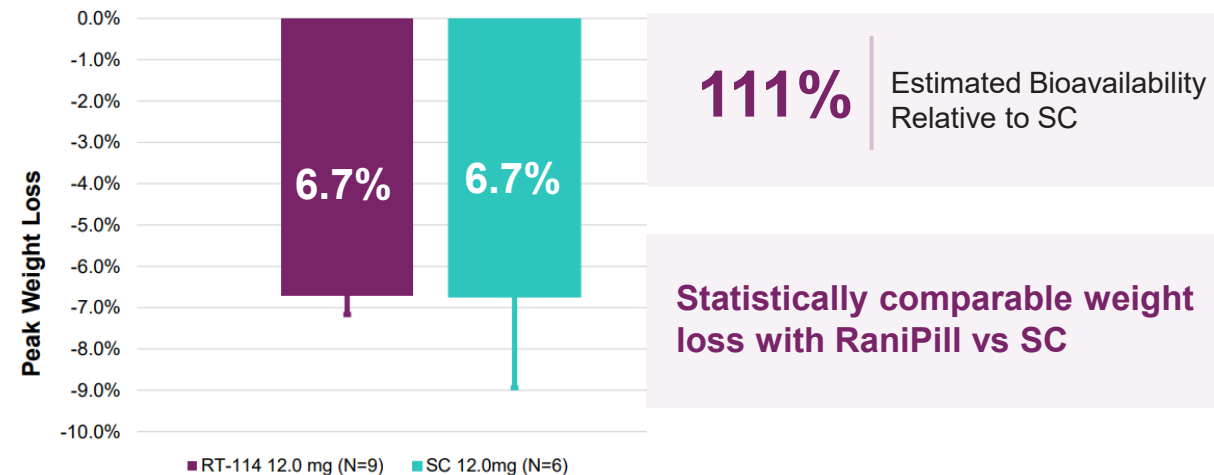
84%

Estimated Bioavailability
Relative to SC



**RT-114 (Oral GLP-1/GLP-2)
Preclinical Canine Study**



Pharmacodynamics of RT-114 vs SC



Development Pipeline

	Indication(s)	Discovery	Pre-Clinical	Phase 1	Phase 2	Partner
OBESITY PROGRAMS						
RT-114	Obesity	GLP-1/GLP-2				ProGen
RT-116	Obesity	Semaglutide				
IMMUNOLOGY PROGRAMS						
RT-105	Rheumatoid Arthritis	Adalimumab***				
RT-111	Psoriasis	Ustekinumab***				
ENDOCRINOLOGY PROGRAMS						
RT-102	Osteoporosis	PTH-OP				
RT-110	Hypo-parathyroidism	PTH-Hypo				
PARTNER PROGRAMS						
RT-XXX	Rare Disease	Undisclosed****				  Roche Group

* Clinical timelines are subject to potential regulatory agency review delays

** RT-114 is the subject of a worldwide collaboration with ProGen Co, Ltd.

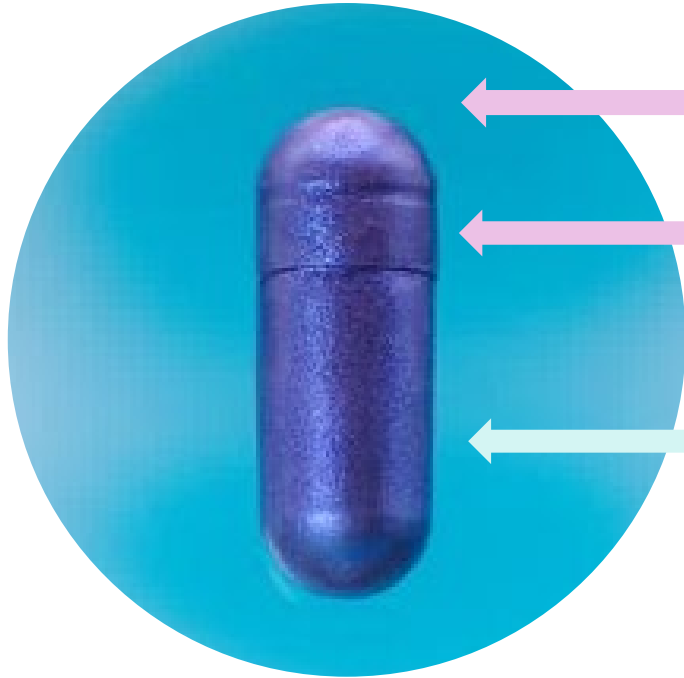
*** Ustekinumab and adalimumab biosimilars are supplied by Celltrion, Inc. Celltrion grants Rani a license and drug supply for each drug.

****RT-XXX is the subject of a worldwide collaboration and license with Chugai Pharmaceutical Co., Ltd.

Obesity Strategy & Rationale

RaniPill Technology Enables Portfolio of Obesity Products

Modality Agnostic Technology



RT-114: Weekly Oral GLP-1/GLP2 – *Phase 1 initiated*

RT-116: Weekly Oral Semaglutide – *Demonstrated preclinical PK & efficacy*

Potential to Deliver:

- GLP-1/GIP
- PYY
- ActRII
- GLP-1/GIP/Amylin
- Amylin Analogs
- Other Incretins (single, dual, and triagonists)

Rani Plans to take a Portfolio Approach
With Internal Programs and External Partnerships

Most Patients Aren't Staying on Obesity Therapies For Long Enough to Achieve Meaningful Weight Loss



Real-World Trends in GLP-1 Treatment Persistence and Prescribing for Weight Management:



30% of patients stopped treatment within four weeks, before reaching the targeted dose.

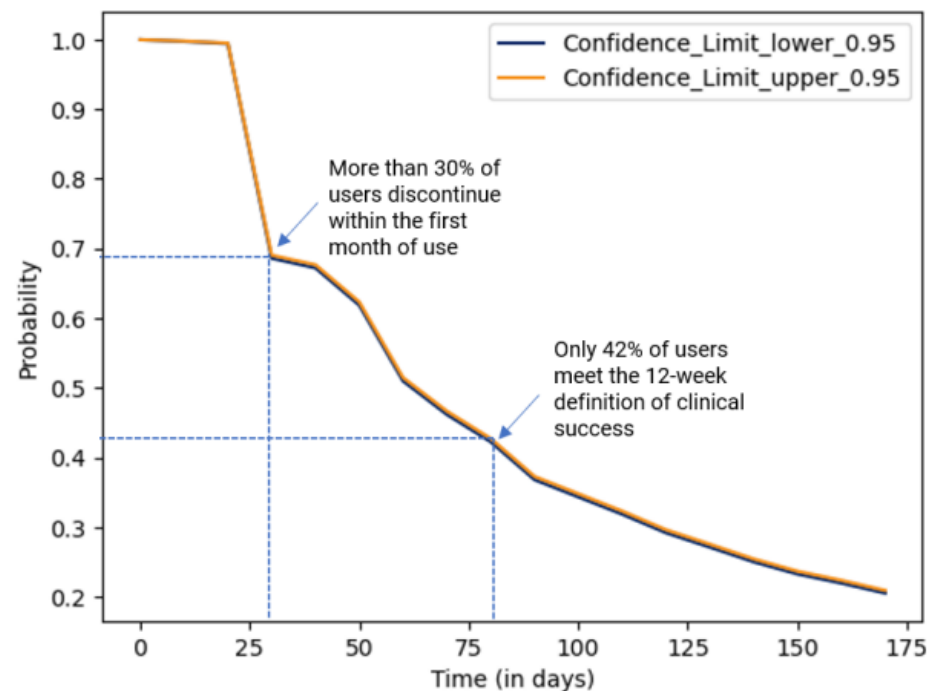


Many people discontinued use of GLP-1 therapy before achieving clinically meaningful weight loss.



LESS THAN HALF of those prescribed stay on the medication for 12 weeks or more.

Overall time to treatment discontinuation in GLP-1 users for weight management.



The probability of staying on a GLP-1 drug drops drastically between zero and six weeks. These individuals are not on a GLP-1 long enough to see a clinically meaningful benefit.

The Problem with Orals: Discontinuation, API, and Convenience



Orforglipron*

- Small-molecule oral GLP-1
- Requires **daily administration**
- Highest dose showed weight loss of **12%** after **72-weeks** compared to 15% expectation set by injectables
- **20-week titration period** to reach highest dose
- **1 in 10 individuals** at the highest tested dose **dropped out** of the study



VK2735*

- Orally available GLP-1/GIP peptide
- Requires **daily administration**
- Highest dose showed weight loss of 12% after 13 weeks
- **38%** at the highest tested dose **dropped out** of the study and 28% across lower doses
 - **98%** reported drug-related treatment-emergent adverse events



Oral Semaglutide

- Orally available GLP-1 peptide
- Requires **daily administration**
- Demonstrated **bioavailability as low as <1%**^[5]
- Requires **145x dose compared to injectable**^[6]
- High **API requirements will limit** launch to US market
- Highest dose showed weight loss of 13.6% after 64 weeks
- **Approved for a 1.4mg, fraction of effective dose**



RaniPill Technology Overcomes The Challenges of Oral Delivery

- ✓ Payload agnostic
- ✓ Bioavailability comparable to SC
- ✓ Equivalent or superior efficacy in preclinical studies at same dose as SC
- ✓ High capacity may enable weekly or monthly oral dosing
- ✓ No evidence of food effect



RT-114:
Weekly Oral GLP-1/GLP-2

Rani / ProGen Deal Structure

Rani and ProGen have entered into a collaboration agreement for the development and commercialization of a RaniPill capsule containing PG-102 (GLP-1 / GLP-2 dual agonist) for weight management (including obesity).



Deal Structure

- No upfront payment
- Co-Development Deal
- 50/50 WW revenue and cost share
- Development initially focused on major markets
- Exclusivity only limited to GLP-1/GLP-2



Commercial Rights

- Rani holds exclusive rights to commercialize in the US, Europe, UK, Canada and Australia
- ProGen holds exclusive rights to commercialize in rest of world
- Each party has the right to sublicense within its territories



Manufacturing

- ProGen manufactures the drug substance
- Rani manufactures the drug product

Rani's GLP-1/ GLP-2 Program (RT-114) Has Multiple Potential Competitive Differentiators

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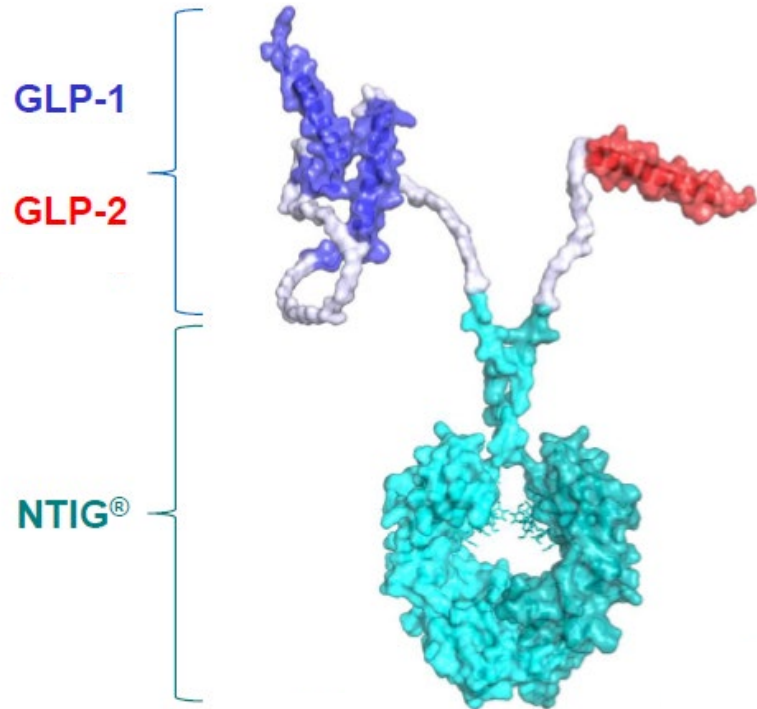
ProGen

PG-102
GLP-1/GLP-2

Potential Key Advantages:

- ✓ **Weight loss** comparable to approved products
- ✓ Improved **tolerability**
- ✓ Better **lean mass preservation** & improved nutrient absorption
- ✓ Shorter dose titration period
- ✓ **No painful injections**
- ✓ **Dose equivalent** to injectables
- ✓ Weekly oral dosing

PG-102: Long Acting, Bispecific GLP-1/GLP-2 Dual Agonist for the Treatment of Obesity



▶ Bispecific GLP-1/GLP-2, with optimized ratio biased toward GLP-1

▶ Heterodimeric Fc Fusion Protein

▶ Prolonged Half-Life

PG-102 Phase 1a Injectable SAD Results Show Good Tolerability

Target Population	Healthy Subject
Administration	Single
Dosing Regimen	PG-102 vs Placebo
Primary Endpoint	Safety / Tolerability / PK
N=	8 Subjects per Group

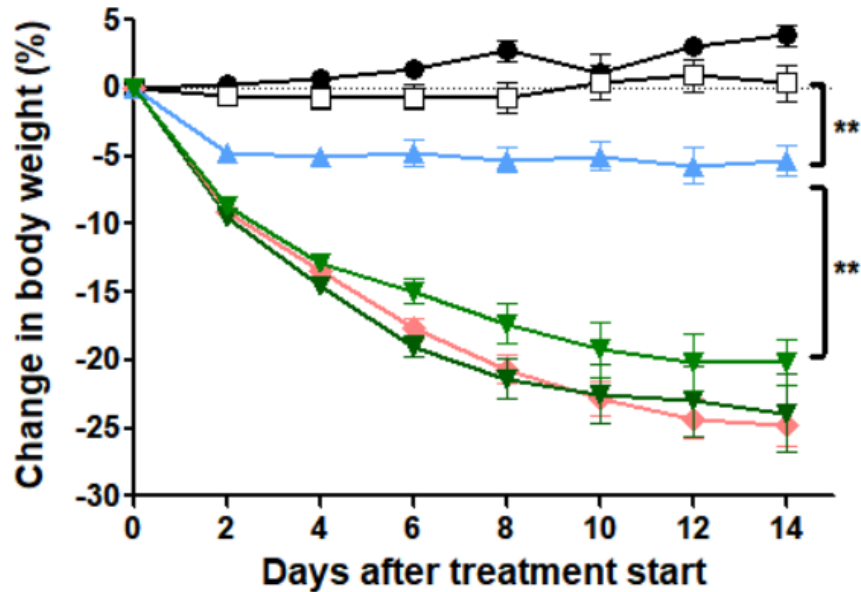
Safety and Tolerability are a main concern with metabolic therapies due to high discontinuation rates

Summary of treatment-emergent adverse events (during 28-day period, Phase 1 SAD)

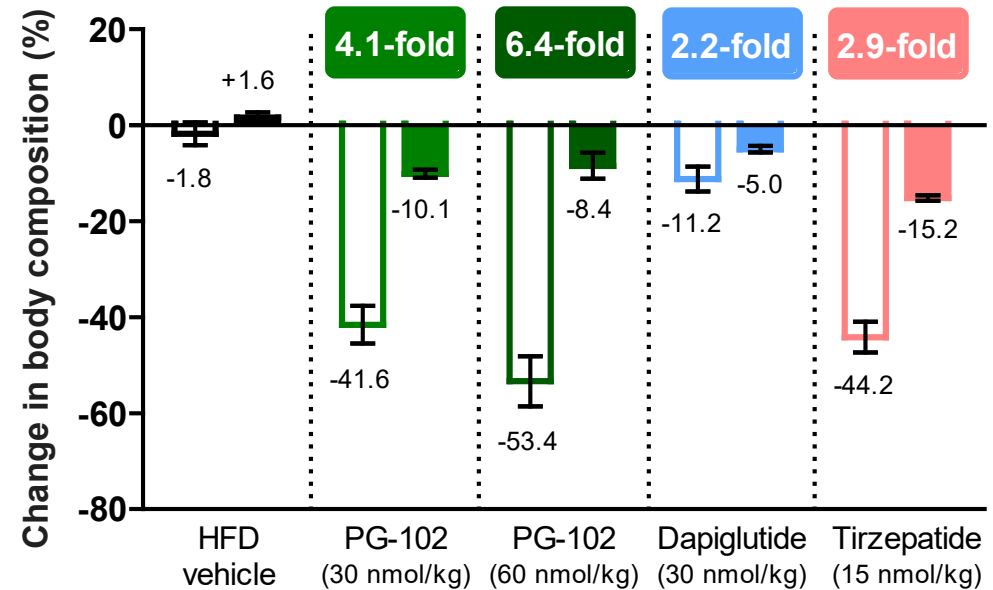
TEAEs	PG-102				
	Placebo	5 mg	15 mg	30 mg	60mg
Decreased appetite	0	0	1 (12.5%)	2 (25%)	2 (25%)
Nausea	0	0	0	0	3 (37.5%)
Diarrhea	1 (12.5%)	0	0	0	0
Vomiting	0	0	0	0	1 (12.5%)
Dyspepsia	0	1 (12.5%)	0	2 (25%)	2 (25%)
Constipation	1 (12.5%)	0	0	1 (12.5%)	0

PG-102 Reduces Body Weight & Improves Body Composition (DIO mice w/o RaniPil)

Improvement of body composition (fat vs. lean mass loss),
under similar weight loss condition (vs. Tirzepatide)



- Control
- ▲ Dapiglutide (30 nmol/kg)
- ▼ PG-102 (30 nmol/kg)
- ◻ HFD vehicle
- ◆ Tirzepatide (15 nmol/kg)
- ▼ PG-102 (60 nmol/kg)



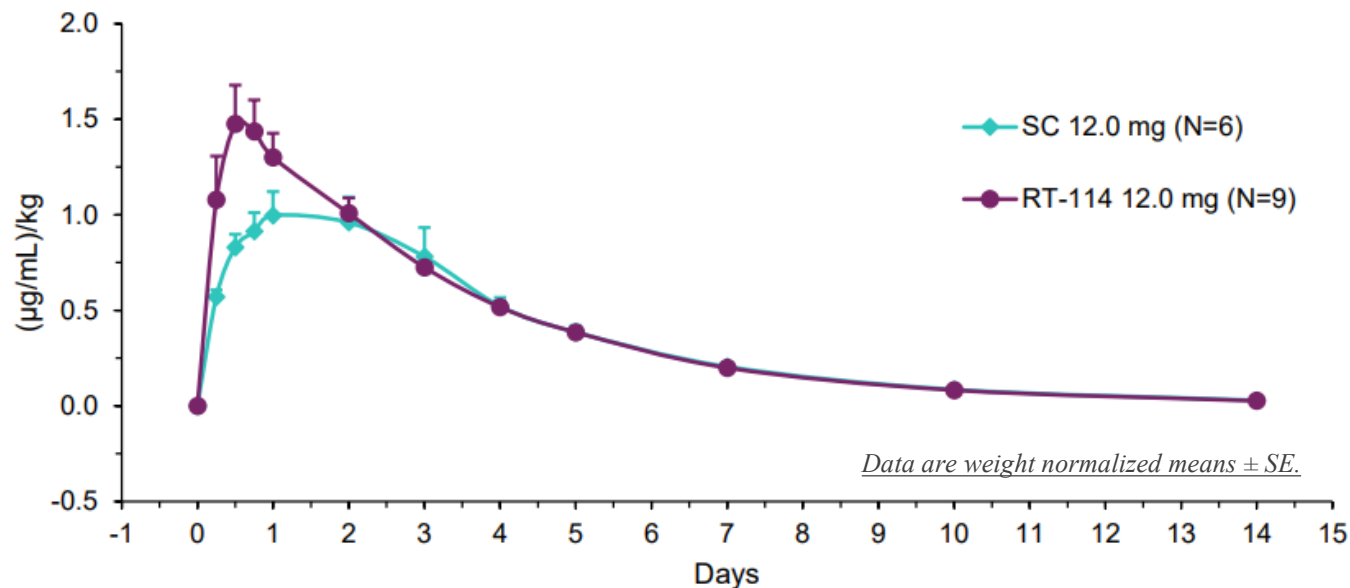
- ◻ Fat mass loss
- Lean mass loss

**p<0.01. Data are shown in ±SEM.

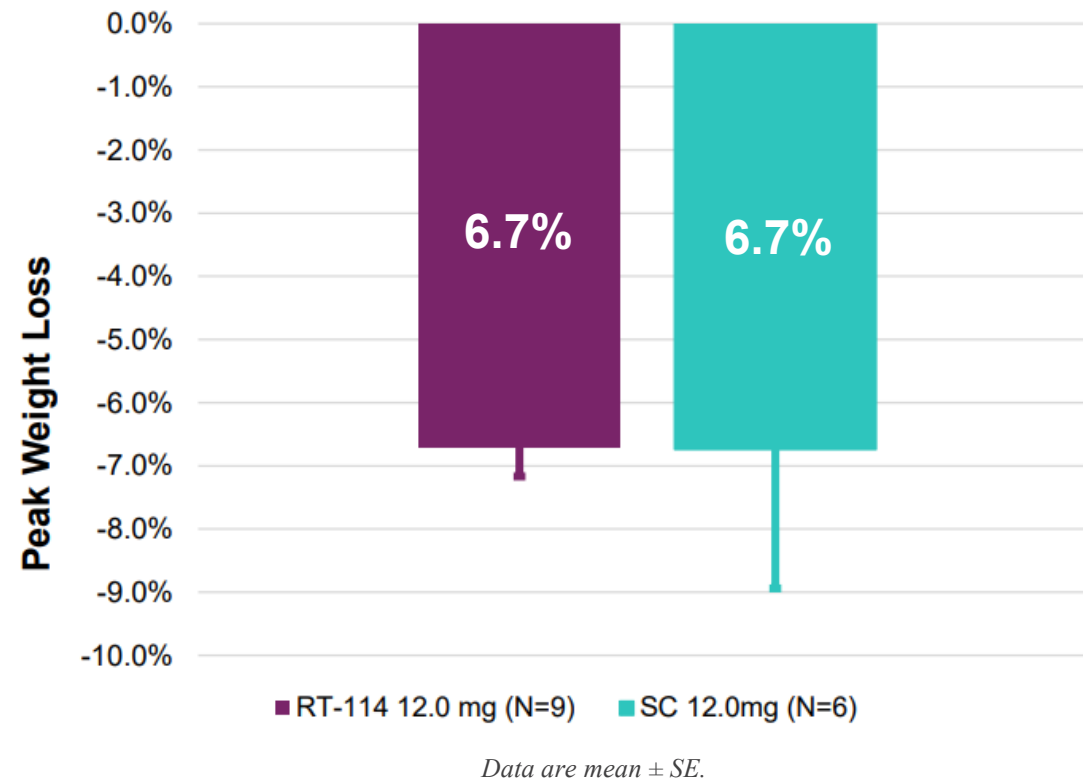
DIO=diet-induced obesity; HFD=high fat diet; SEM=standard error of the mean; VAT=visceral adipose tissue; SAT=subcutaneous adipose tissue
Source: Timothy Oh et al., The Effect of Bispecific GLP-1R/GLP-2R Agonist Compared with Dual GLP-1R/GLP-2R Agonist and Dual GLP-1R/GIPR Agonist in Diet-Induced Obesity Mouse Model. Presentation at the 83rd ADA Annual Meeting.; †Jastreboff AM et al., N Engl J Med. 2022 Jul 21;387(3):205-216.

RT-114 (Oral PG-102) Preclinical PK / PD

RT-114 Vs SC: Weight Normalized



Pharmacodynamics of RT-114 vs SC



111%

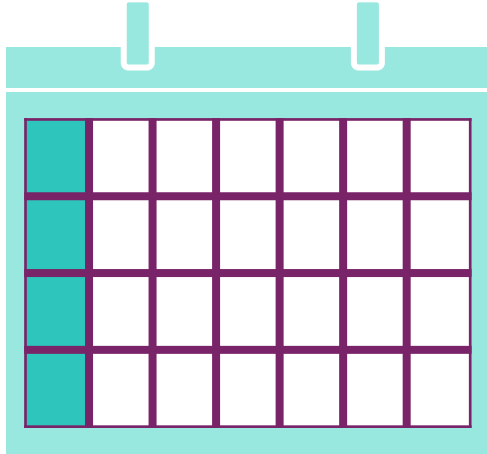
Estimated Bioavailability
Relative to SC

RT-114: Phase 1 Study Design

Phase 1A and 1B

Study Phase	1A	1B
Study Population	HV (BMI 19-30 kg/m ²)	Obese (non-diabetic) (BMI ≥30 kg/m ²)
Sample Size	30	30
Design	Open-label	Randomized, Double-blind
Objective(s)	<ul style="list-style-type: none">▪ Safety (TEAEs & SAEs)▪ PK▪ BA	<ul style="list-style-type: none">▪ Safety (TEAEs & SAEs)▪ PK▪ PD (% change in BW, lipids, glucose)
Dose Group(s)	<ul style="list-style-type: none">▪ SC Injection 12 mg (N=10)▪ RT-114 12 mg (N=20)	<ul style="list-style-type: none">▪ Placebo (N=10) QW▪ RT-114 30/60 mg (N=20) QW
Treatment Period (F/U)	Single ascending dose - 4 weeks F/U	Repeat Doses 8 weeks - 4 weeks F/U

RT-114 Target Dosing

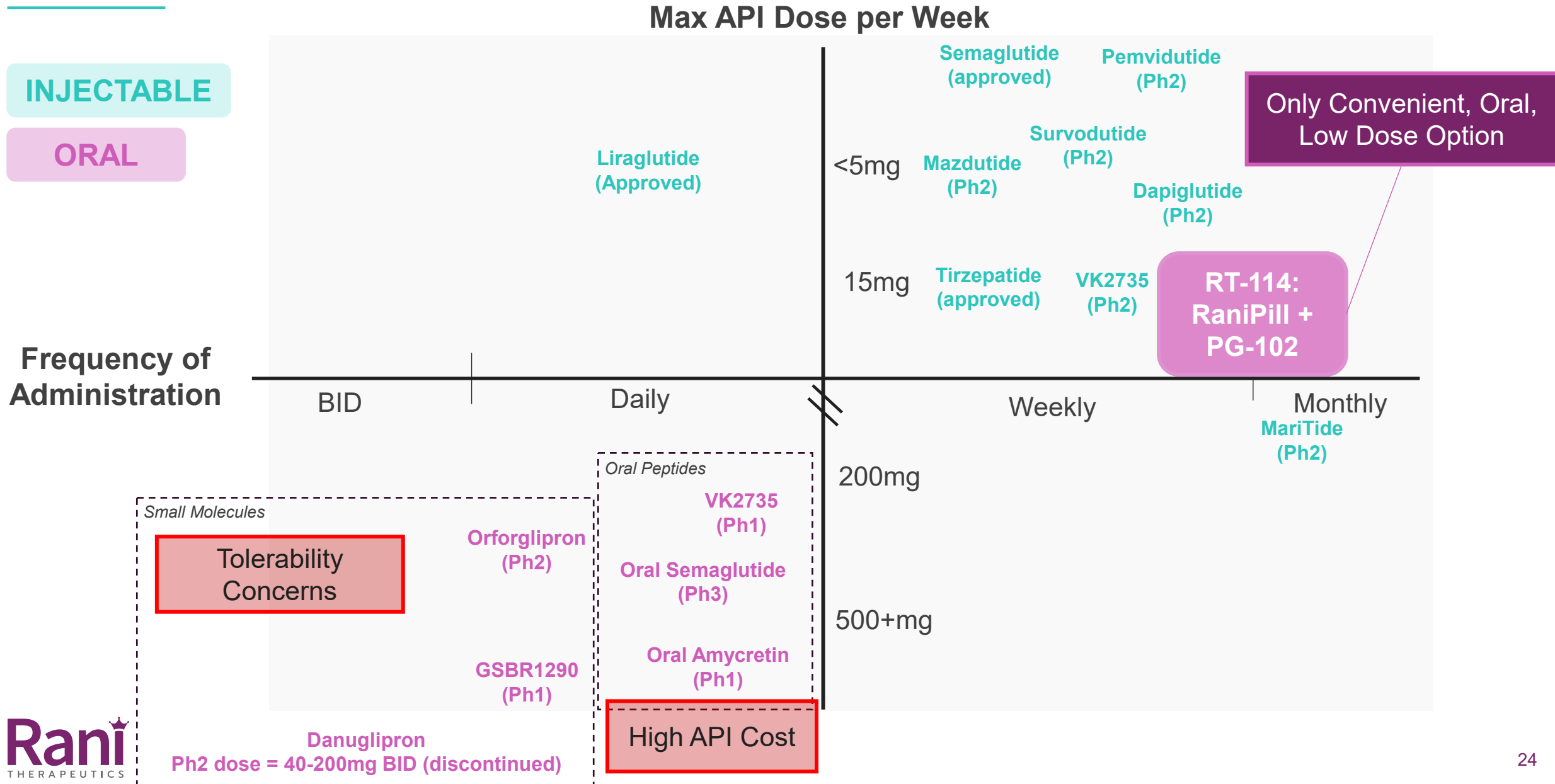


Weekly Oral Dosing

Key Benefits Targeted:

- No painful injections
- Potential for better tolerability with more frequent, smaller doses than injectable
 - Tighter banding of serum concentrations
- Potential for less frequent administration than oral competitors
 - Other orals expected to require daily or BID dosing
- Potentially no dose titration required
- Less API required compared to chemistry based oral approaches

Clear Opportunity in Obesity Landscape for RT-114^[7]

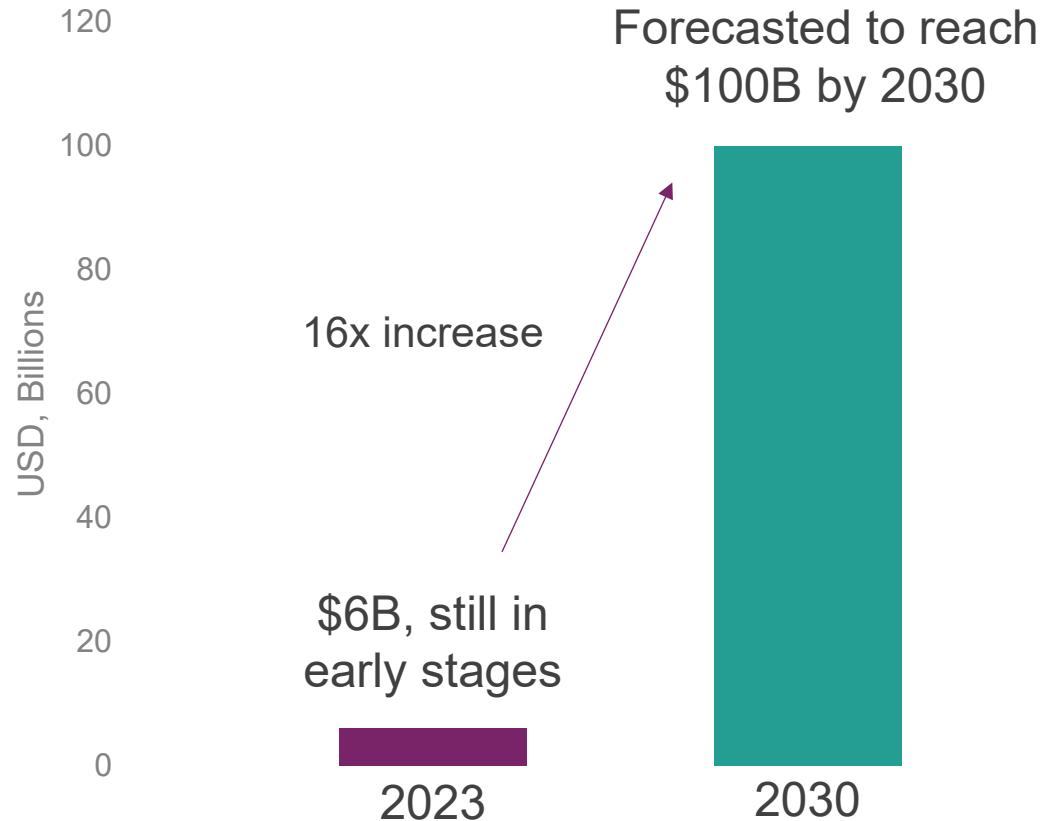




Opportunity for Weekly, Oral Semaglutide

There Are Safe, Effective Treatments For Obesity With Semaglutide At The Forefront

Anti-Obesity Medications Market *

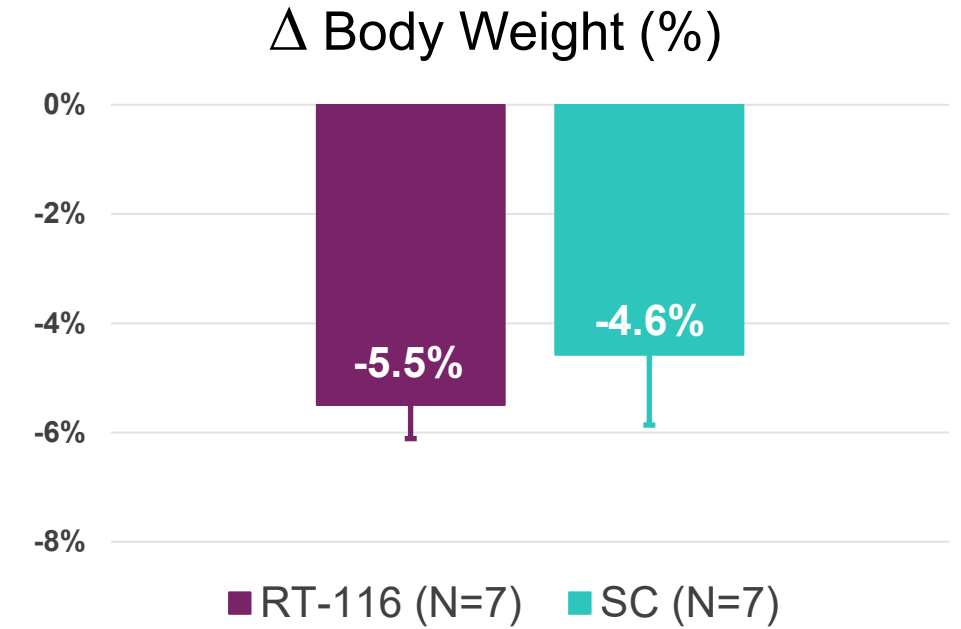
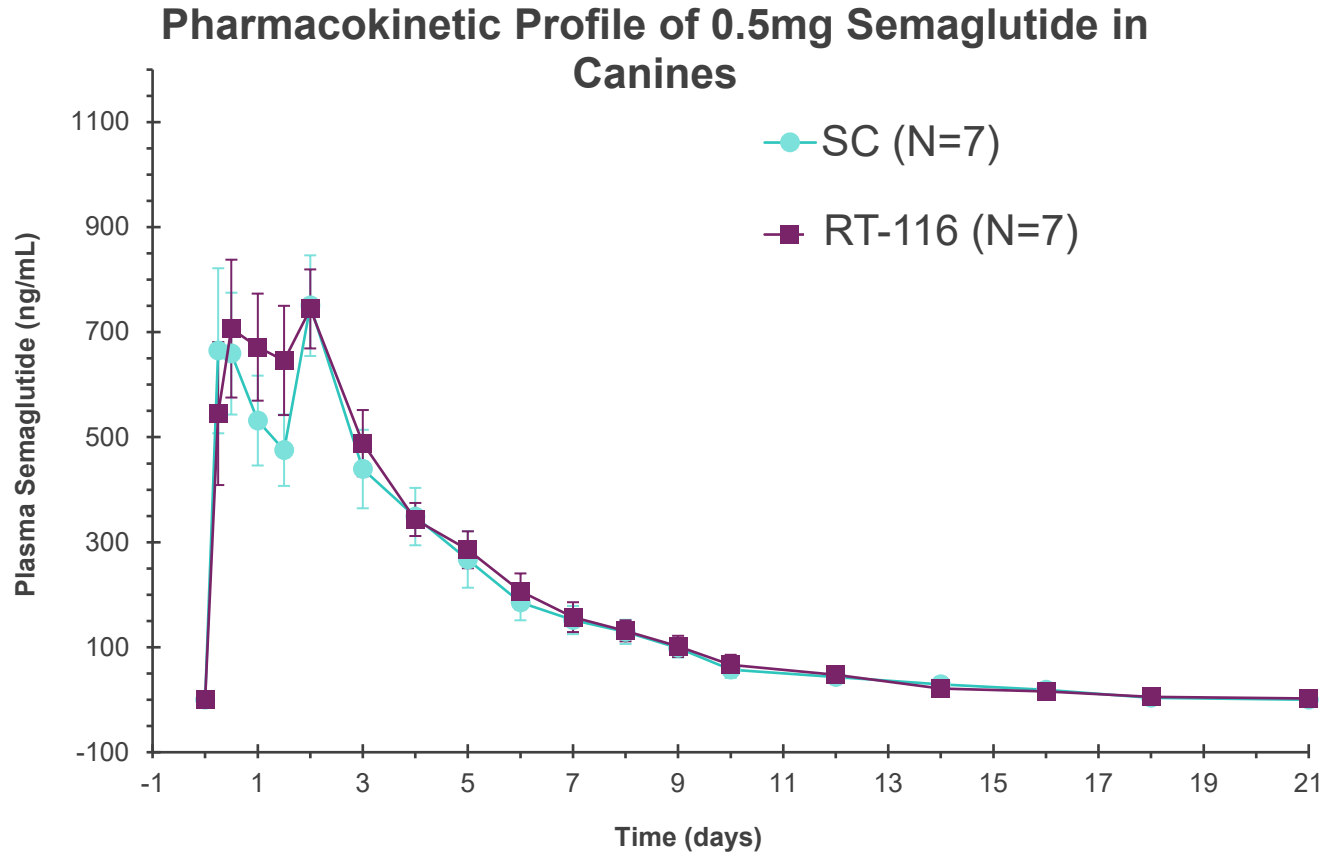


Novo Nordisk's Wegovy Revenue (Semaglutide for Obesity)**

- Approved in US 2019, EU 2020

	Total Net Sales	US Net Sales
2022	868M	860M
2023	4.4B	4.1B
2024	9.0B	7.1B

Semaglutide Orally-delivered via RaniPill Capsule Shows Comparable Bioavailability and Weight Loss with the SC Route



107%

Estimated Bioavailability Relative to SC

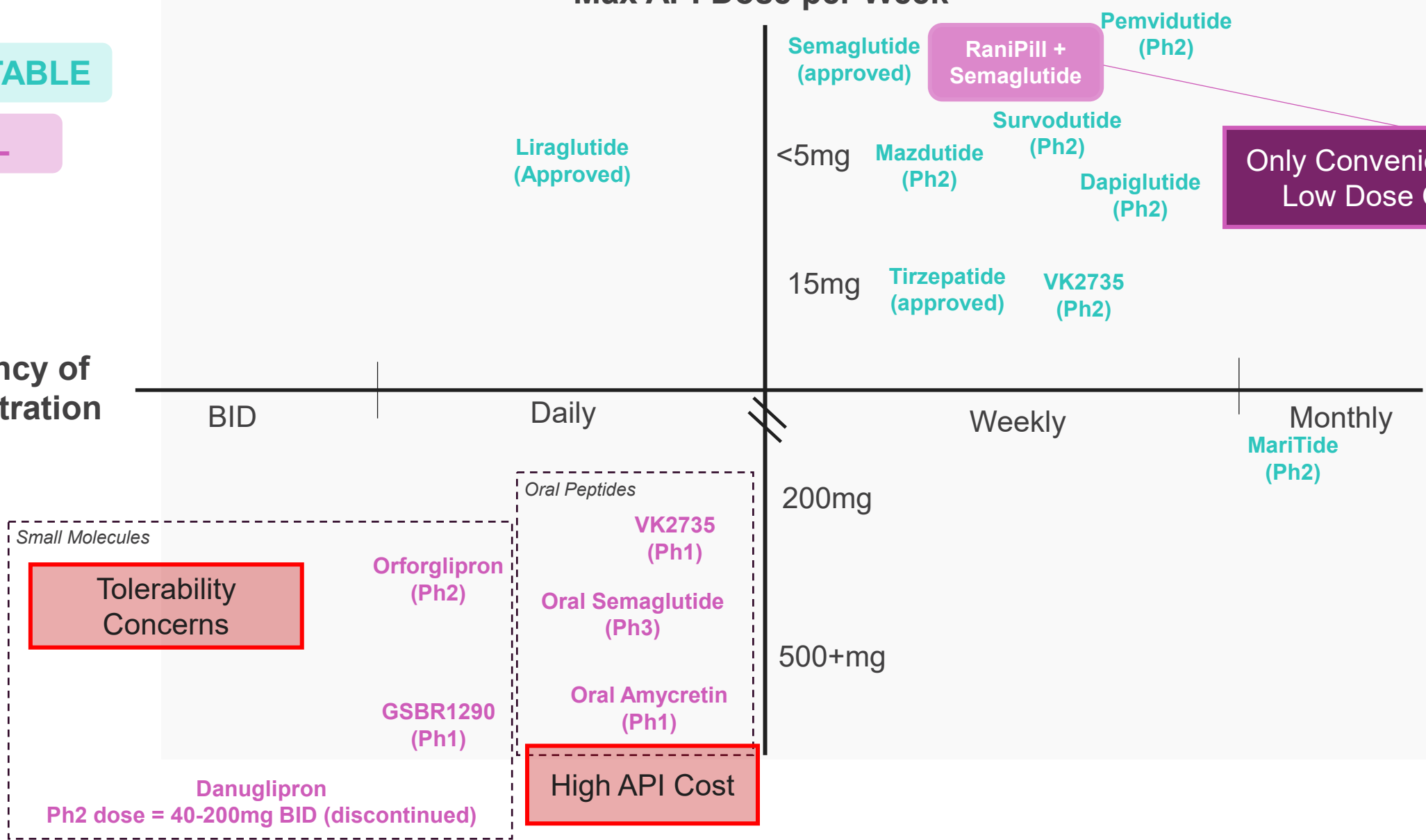
Clear Opportunity in Obesity Landscape for RaniPill + Semaglutide^[4]

INJECTABLE

ORAL

Max API Dose per Week

Frequency of Administration



A close-up photograph of a hand holding a single purple pill. The hand is cupped, and the pill is resting in the center. The background is a soft, out-of-focus light color. The entire image has a semi-transparent purple overlay.

Thank You

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