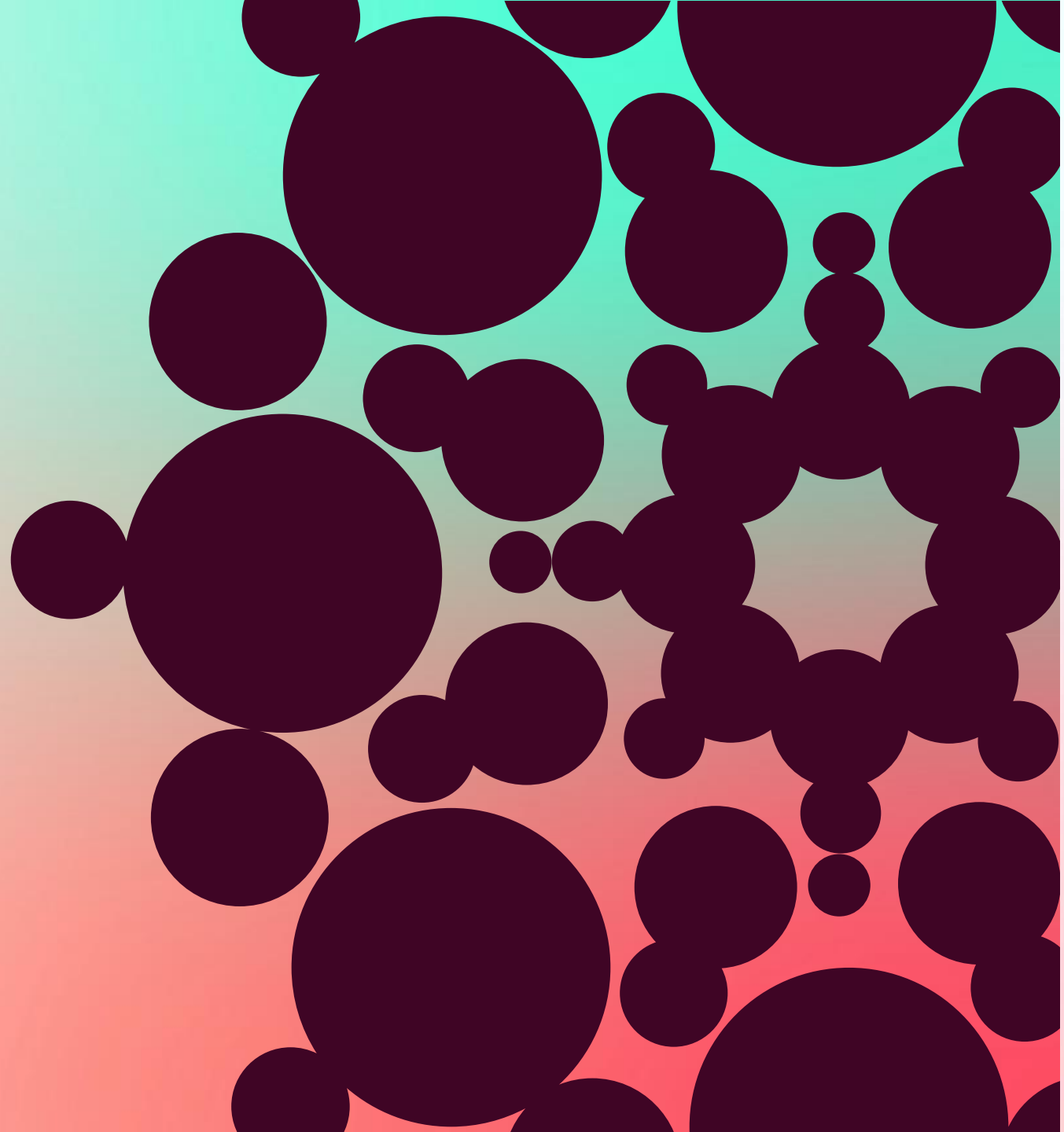




Breaking the Pattern in Obesity and Type 2 Diabetes

Corporate Presentation | October 2024



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Fractyl Health aims to end obesity and T2D



Developing pattern-breaking therapies to treat root causes of obesity and type 2 diabetes (T2D)



Revita in late-stage development – an outpatient endoscopic procedure addressing a root cause of obesity and type 2 diabetes in the gut – with multiple study readouts starting in Q4 2024



Developing **Rejuva** – a one-and-done pancreatic gene therapy platform for obesity and T2D – anticipate entering the clinic with a Smart GLP-1™ in H1 2025



Management Team and Board of Directors with deep expertise and track record of success

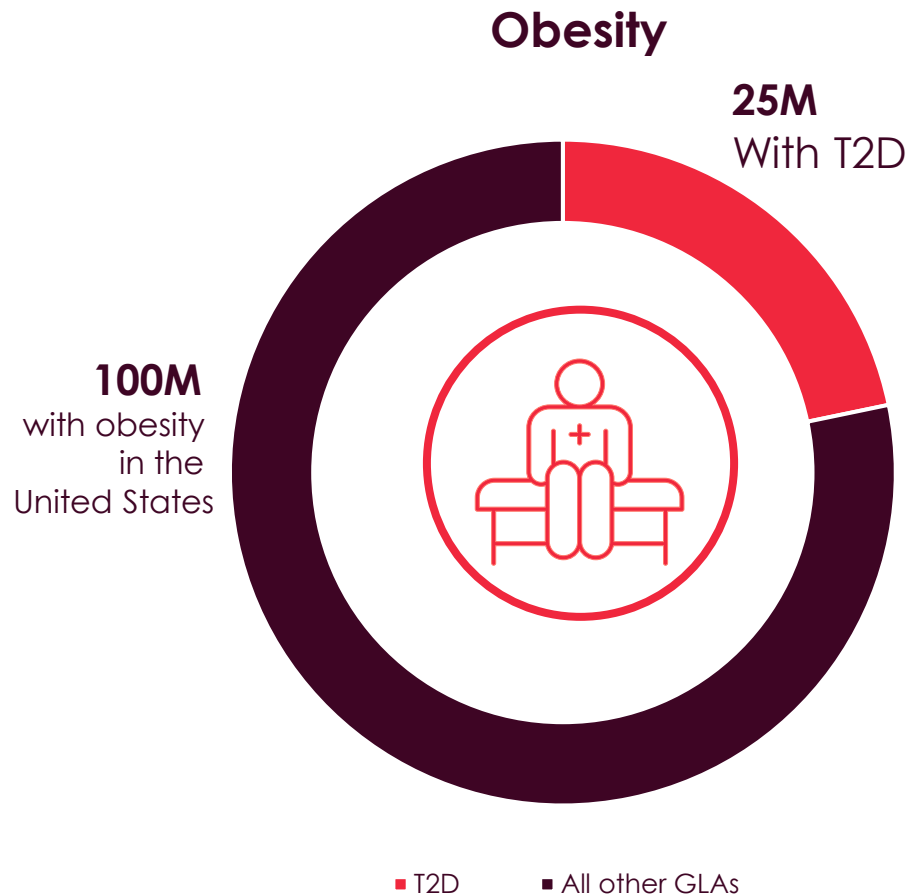


Well-capitalized with \$102 million in cash and cash equivalents as of June 30, 2024



Obesity is the largest market opportunity in healthcare

Metabolic dysfunction drives substantial disease risk



40% of adult Americans have obesity today¹

Individuals with a BMI ≥ 30 kg/m² carry more than a 40% increased risk for overall mortality²

New scientific insights point to a dysfunctional metabolic setpoint as a root cause of disease³

Other than bariatric surgery, **there are no treatments today that can durably correct obesity**



Chronic drug therapy fails most people with obesity

Poor persistence and weight rebound prevent sustained benefits in real world

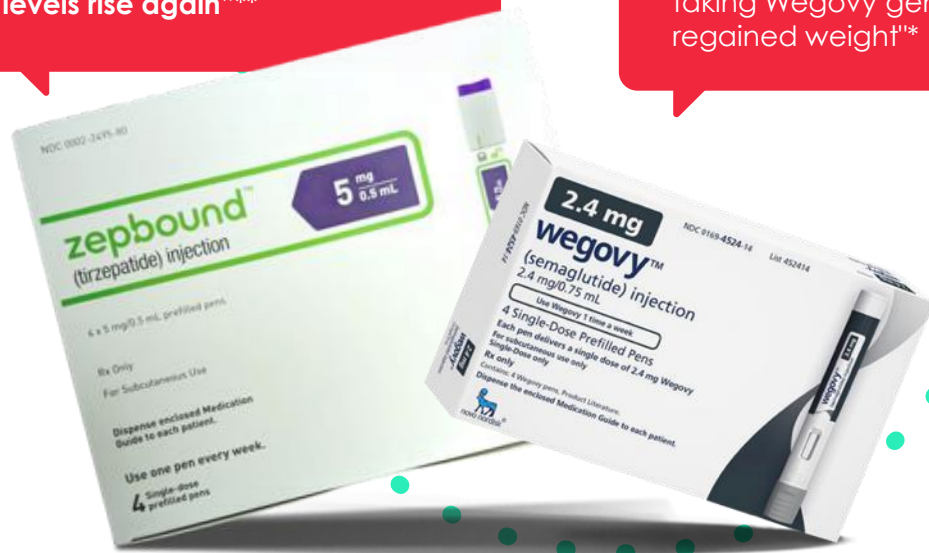
“Many people who stop using Zepbound may regain the weight they lost while on the drug, **and they might also experience increased hunger and insulin resistance as their blood sugar levels rise again**”^{**}

“People who stopped taking Wegovy generally regained weight”^{**}

High discontinuation rates: > 50% of patients discontinue GLP-1 drugs in less than 1 year¹

Rapid weight rebound: Weight and metabolic rebound occur rapidly upon discontinuation²

Approved drugs and drugs in late-stage development may cause weight loss, but **do not solve the biggest problem in obesity - durable weight maintenance**



Fractyl plans to break the pattern of obesity and T2D

Developing therapies designed to provide a durable metabolic reset



Revita

- ~40-minute outpatient procedure targeting a root cause of obesity and T2D in the duodenum
- Real-world and clinical study data show meaningful and sustained weight loss for at least one year after single procedure
- Enrolling pivotal study in weight maintenance; data expected starting in Q4 2024
- T2D pivotal study topline readout expected mid-2025



Rejuva

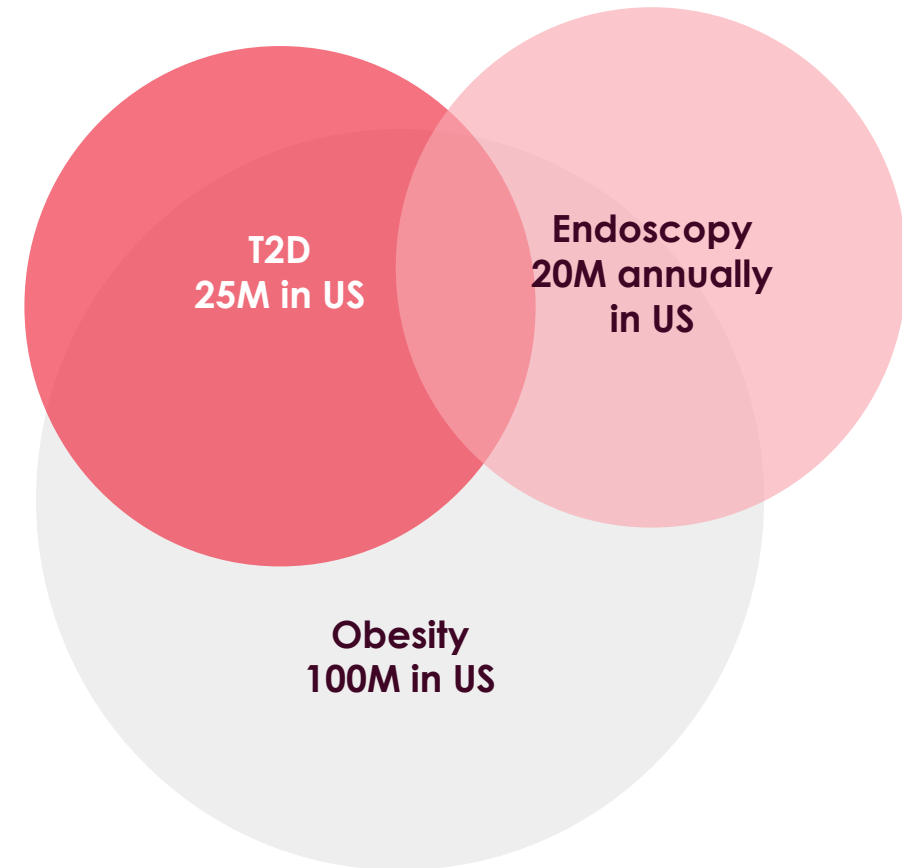
- Novel pre-clinical platform - potentially one and done pancreatic gene therapy
- Pre-clinical data with a one-time Smart GLP-1 show sustained weight maintenance and improved blood sugar and body composition in multiple efficacy models
- Candidate nomination for obesity planned H2 2024
- FIH study for T2D planned H1 2025



Potential for multi-billion dollar annual revenue

Leveraging skills, capacity, and channel of GI endoscopy

- Of the estimated 20 million endoscopies performed annually in US, 8 million are performed on people with obesity – these are potential Fractyl patients
- Fractyl solutions are designed to fit into high volume, highly scalable workflow in endoscopy centers
- Strong clinical and economic value proposition for GI physicians
- Seamless transition to commercial selling model; GI endoscopists focused on obesity and metabolic disease therapies are currently participating in clinical studies



Unlocking value with focused execution in 2024 and beyond

Accomplishments (YTD)

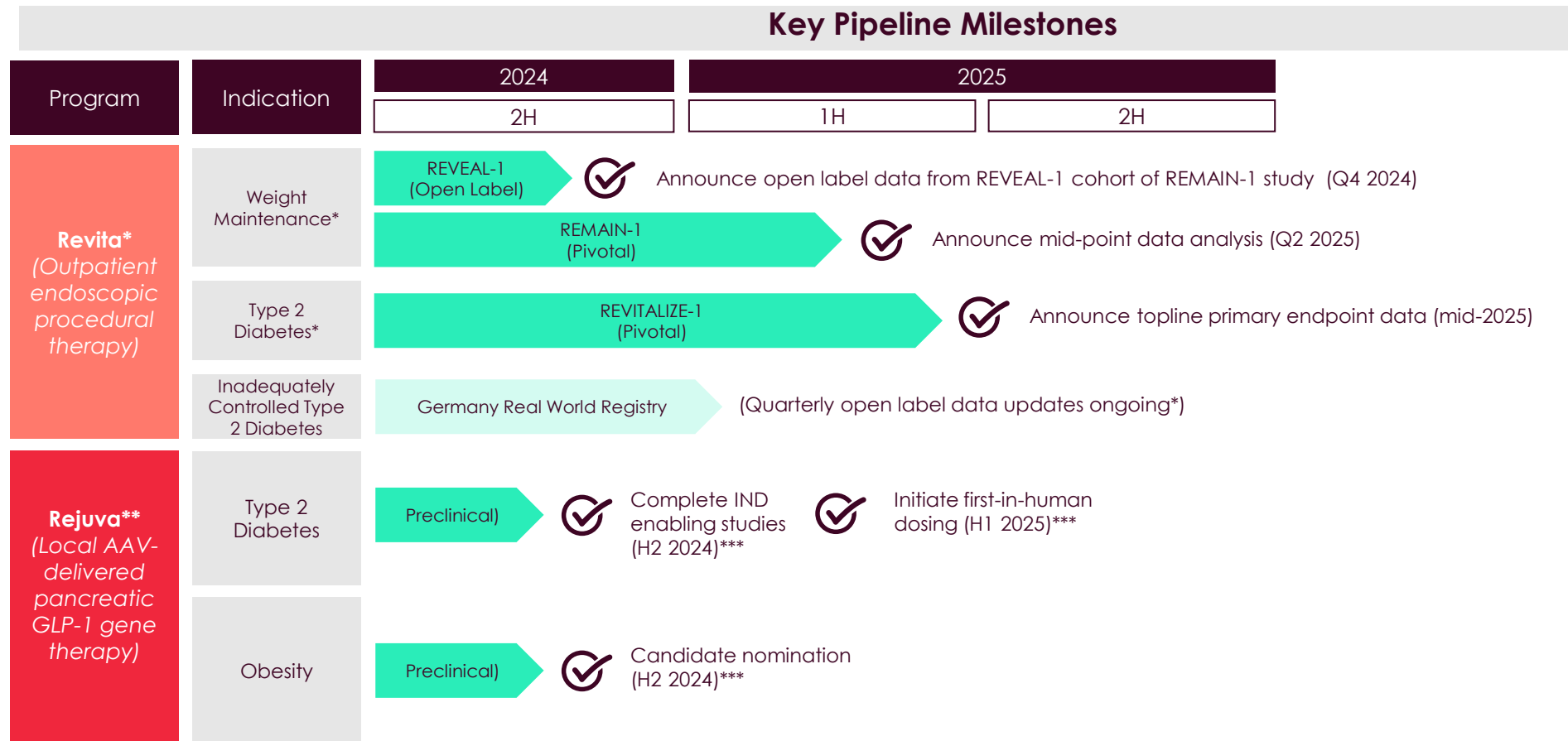
- ✓ Investigational Device Exemption (IDE) approval from FDA in REMAIN-1 study
- ✓ Accelerated REVEAL/REMAIN study in weight maintenance
- ✓ Breakthrough Device designation from FDA in weight maintenance after discontinuation of GLP-1 based drugs
- ✓ Protocol amendment for REVITALIZE-1; expands potential U.S. treatment population by nearly six-fold
- ✓ Compelling 12-month German Real-World registry data (n=11) confirms earlier clinical results showing meaningful and sustained weight loss for at least one year after single Revita procedure
- ✓ Comprehensive and superior proof-of-concept data for Rejuva Smart GLP-1 candidate in head-to-head studies vs. semaglutide in obesity and T2D

Anticipated Milestones (H2 2024+)

- ❑ Open label study updates from the REVEAL-1 cohort of the REMAIN-1 weight maintenance study beginning in Q4 2024
- ❑ Continued readouts from German Real-World Registry
- ❑ Complete IND enabling studies or equivalent for Rejuva in T2D in H2 2024
- ❑ Nominate first candidate for Rejuva in obesity in H2 2024
- ❑ Mid-point analysis from REMAIN-1 in Q2 2025
- ❑ Topline data from REVITALIZE-1 in T2D in mid-2025



Building on significant opportunity with value-driving execution across pipeline in 2024

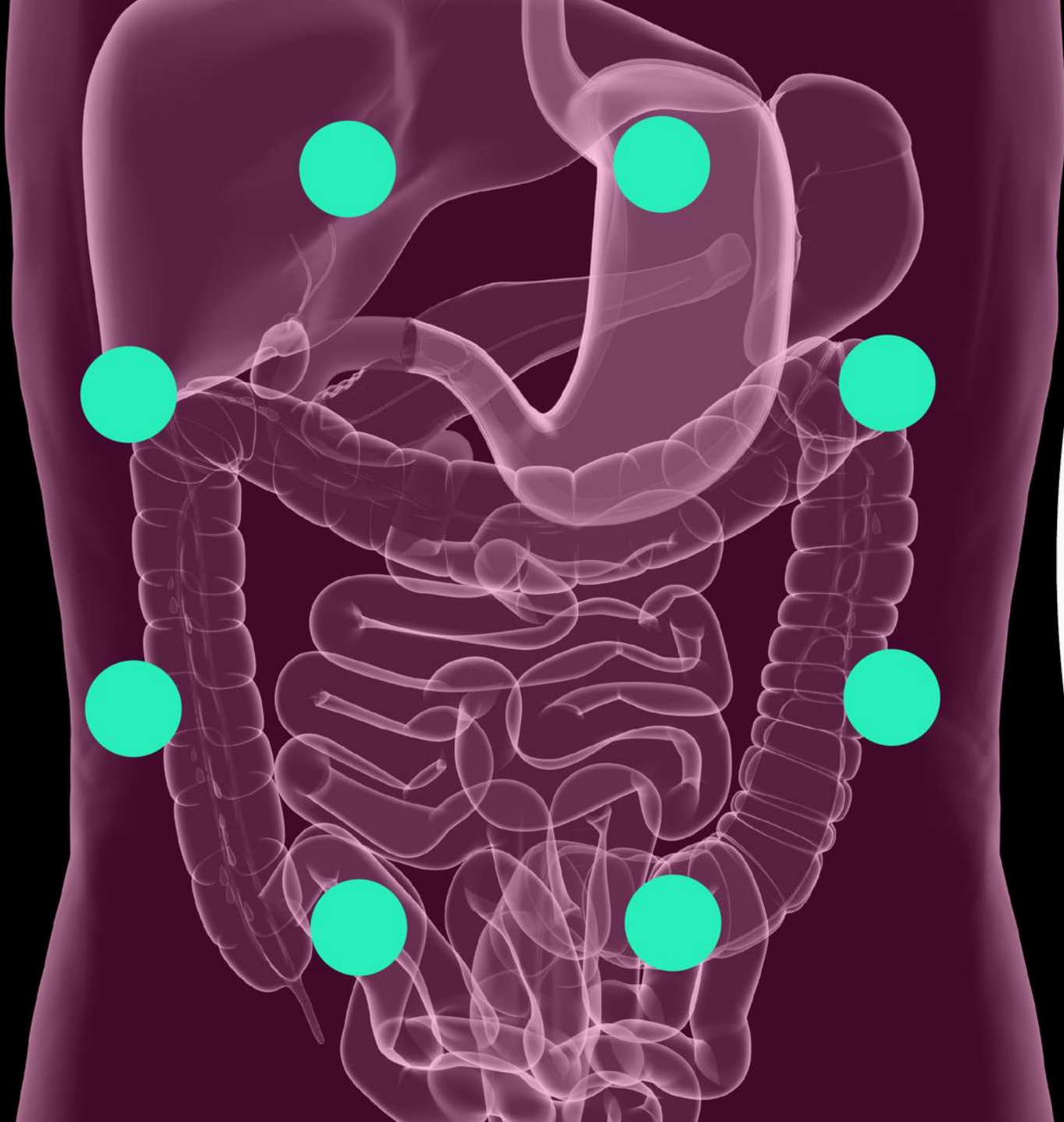


*Revita has been granted Breakthrough Device designation in T2D patients on insulin and for weight maintenance after GLP-1 discontinuation in obesity; and CE mark obtained from EU and UK in 2016 for Revita for the improvement of glycemic control in patients with inadequately controlled T2D despite oral and/or injectable glucose lowering medications and/or long-acting insulin; **Product candidates under our Rejuva gene therapy platform will undergo Phase 1, Phase 2 and Phase 3 clinical studies ***subject to IND approval

IND = Investigational New Drug Application with FDA or comparable regulatory body; IDE = Investigational Device Exemption with FDA or comparable regulatory body; FIH = first-in-human;

PMA = Premarket Approval





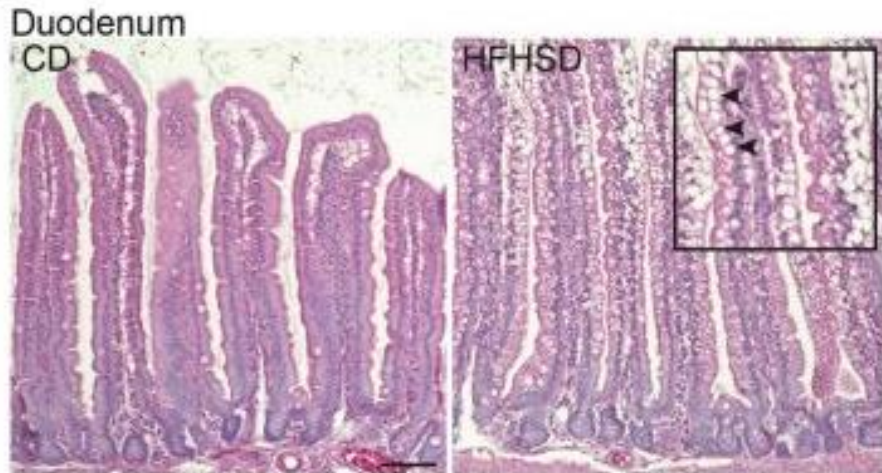
Revita

Potential long-term solution to the problem of weight regain

Revita is for investigational use only in the United States. Revita has a CE mark in the EU/UK.

Gut dysfunction is a root cause of obesity & T2D¹

Altered gut-brain signaling is caused by high fat and sugar diets²



High fat and high sugar diets cause structural and functional changes to the gut lining

Chronic high fat and high sugar diets **cause gut dysfunction**



Gut dysfunction alters gut-brain signaling¹⁻²

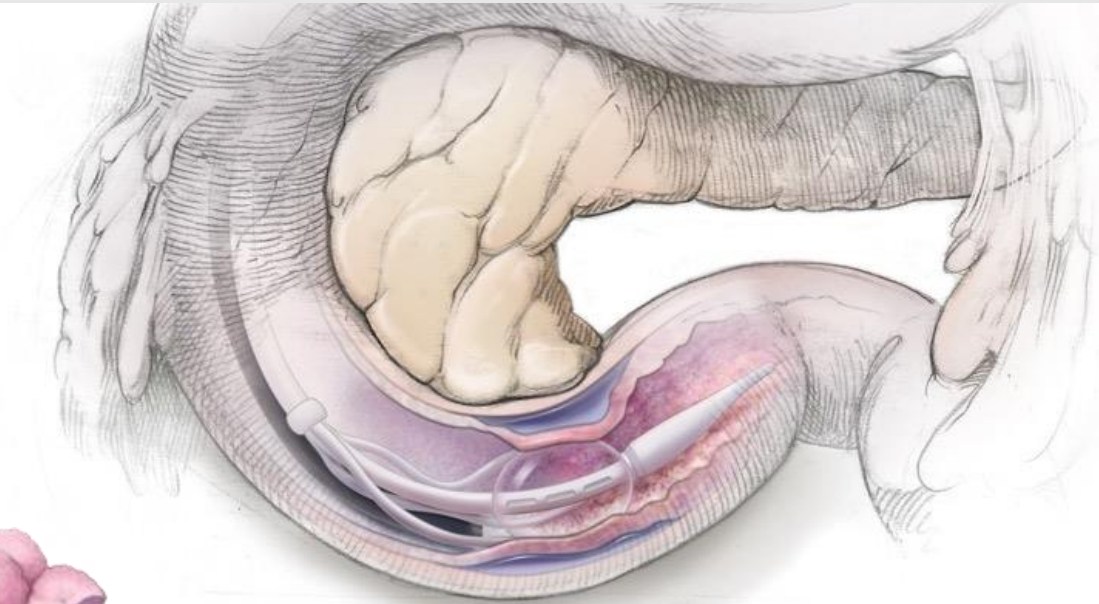


Altered gut-brain signaling **drives obesity and T2D²**



Revita targets this gut dysfunction

First-in-class procedural therapy designed to durably reset metabolism¹⁻⁴



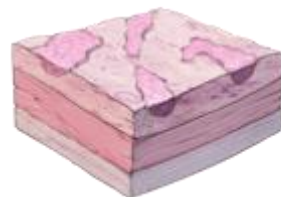
Outpatient endoscopic procedural therapy

Clinical studies in > 300 participants

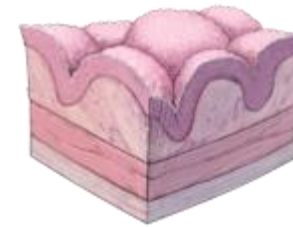
2-year durable improvements in weight and glucose⁴⁻¹⁰



Dysfunctional



Ablated



Regenerated

1. Mah AT et al. Endocrinology. 2014 155:3302-3314. 2. Mao J et al. Diabetes. 2013 62:3736-3746. 3. de Moura EGH et al. Endosc Int Open. 2019 7:E685-E690. 4. Haidry RJ, et al. Gastrointest Endosc. 2019 90:673-681.e2. 5. van Baar ACG, et al. Endosc Int Open. 2020 8:E1683-E1689. 6. Rajagopalan H, et al Diabetes Care. 2016 39:2254-2261. 7. van Baar ACG, et al. Gut. 2020 69:295-303. 8. Mingrone G, et al. Gut. 2022 71:254-264. 9. van Baar ACG, et al. Gastrointest Endosc. 2021 94:111-120.e3. 10. van Baar et al. Diabetes Res. Clin. Pract. 2022 184:109194



Proprietary device designed for durable and repeatable metabolic reset

Control console

Single-use catheter

Real-time sensors



1/2 day training

< 1 hour procedure time

< 4 cases for proficiency

Extensively tested in hundreds of clinical trial participants

80+ issued patents covering methods, systems, devices
CE Mark in EU/UK

Reimbursed and marketed in Germany

Breakthrough Designation from FDA in weight maintenance in obesity and insulin-treated T2D



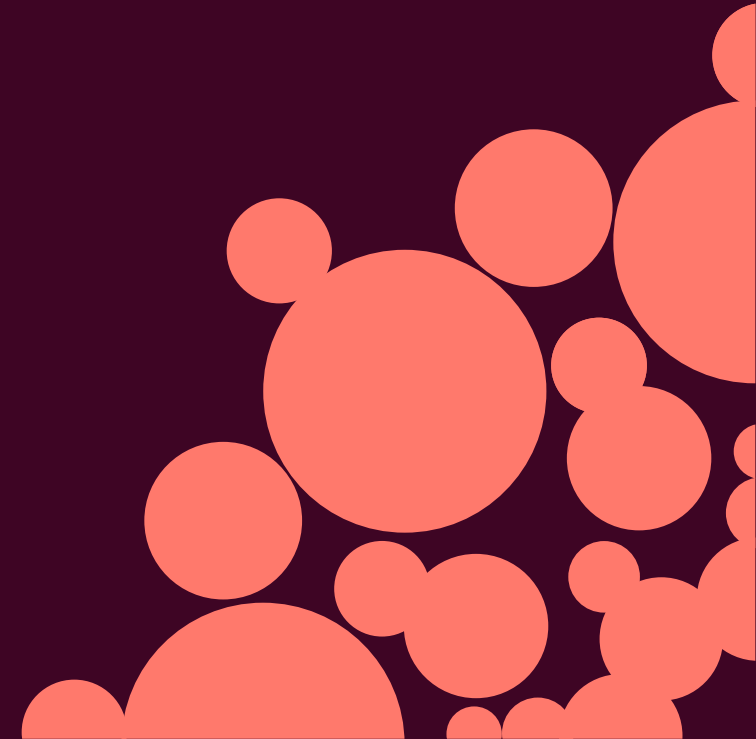
Revita is for investigational use only in the United States. Revita has a CE mark in the EU/UK. This is a rendering of a commercial prototype.

REMAIN-1 Program

Goal: Durable weight loss after GLP-1 drug discontinuation



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REMAIN-1 pivotal study in weight maintenance

Planned mid-point data analysis anticipated in Q2 2025

Patient population

- Obese patients (BMI 30) without T2D and GLP-1 drug naïve
- **Planned mid-point data analysis after ~45 participants randomized and followed for 12 weeks**
- At least 315 additional participants in pivotal phase

Co-primary endpoints

- Change from baseline in weight to week 26 and % of Revita participants who maintain at least 5% TBW loss at week 24

Key secondary endpoints

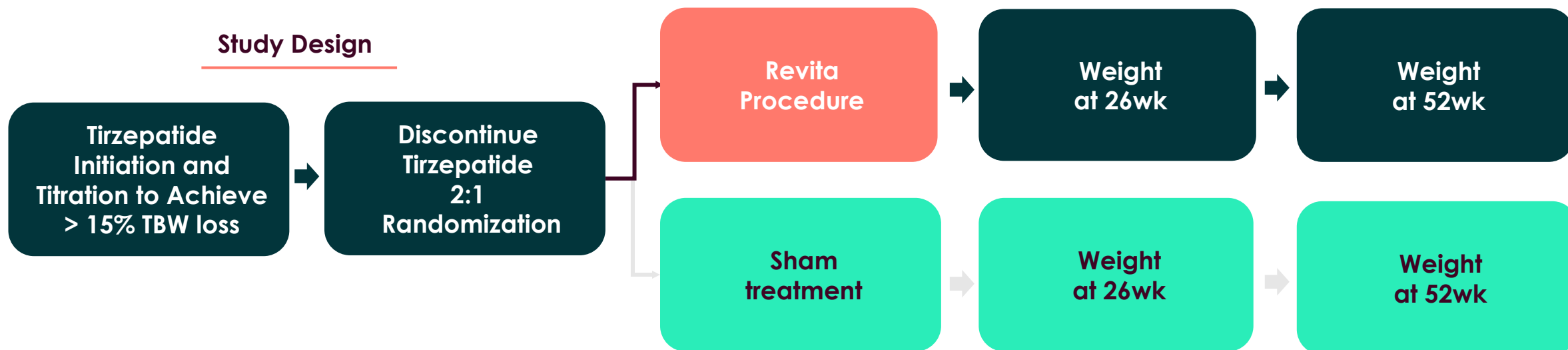
- Glucose, CV risk factors

Study design

- Randomized (2:1), double blind, sham controlled after GLP-1 discontinuation
- Diet and lifestyle counseling throughout

Anticipated timing

Planned mid-point data analysis expected in Q2 2025



TBW = total body weight

REVEAL-1 weight maintenance study¹

Open label study for patients who need to stop GLP-1s

Patient population

- Obese patients (BMI 30) without T2D and achieving at least 15% TBW loss with tirzepatide or semaglutide and cannot continue drug
- Up to 20 participants

Co-primary endpoints

- Change from baseline in weight compared to historical controlled studies of GLP-1 withdrawal

Key secondary endpoints

- Glucose, CV risk factors

Study design

- Single-arm, open-label, cohort study of Revita after GLP-1 drug discontinuation
- Diet and lifestyle counseling throughout

Anticipated timing

Open label study updates expected starting in Q4 2024

Study Design



TBW = total body weight ¹. REVEAL-1 is an open label cohort as part of the REMAIN-1 pivotal IDE. Participants may either already be taking GLP-1 based semaglutide or tirzepatide and have achieved at least 15% TBW loss or will initiate tirzepatide to achieve at least 15% TBW loss before Revita



REVITALIZE-1 Program

Goal: Durably improve glucose control, maintain weight loss, and reduce medication burden for millions of people with inadequately controlled T2D



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T2D remains a major global health crisis

60+ approved drugs but market continues to grow



> \$350B annual cost of T2D in 2022¹

> \$20B in branded GLP-1 sales for T2D in 2022 (15% CAGR)²

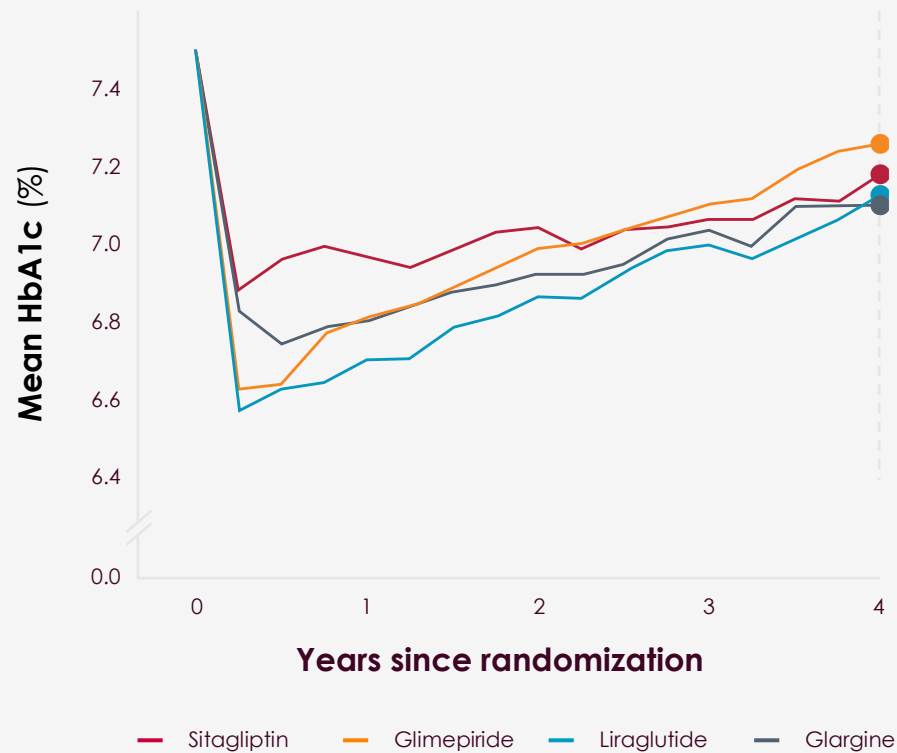
> 50M in US projected to have diagnosed T2D by 2030³



Need to break the pattern of disease progression in T2D

Diminishing effectiveness of T2D therapies over time

Lack of durability of current therapies drives need for medication escalation¹



There is no drug approved for T2D today that can **halt** or **reverse** progression of disease



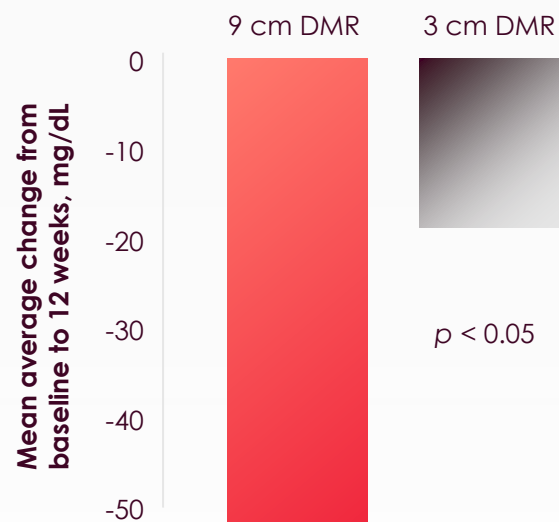
Revita T2D clinical program overview

Consistent effects on blood glucose across clinical studies

Revita FIH¹

Dose-dependent glucose lowering

Dose-Dependent Efficacy

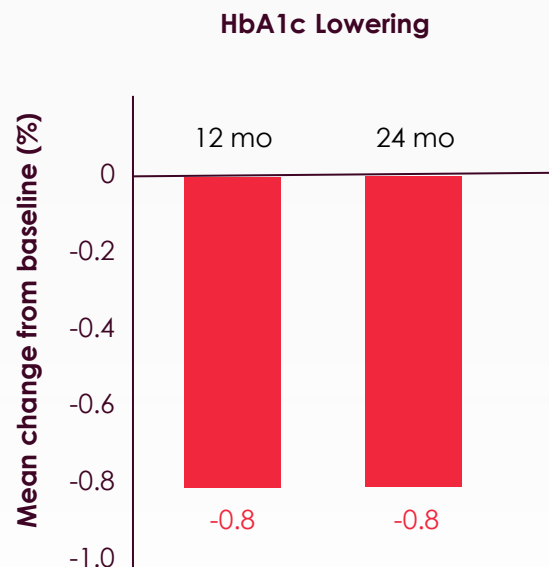


Axial length of treated intestine = treatment dose

Revita-1 Open Label²

2-year glucose lowering and weight control

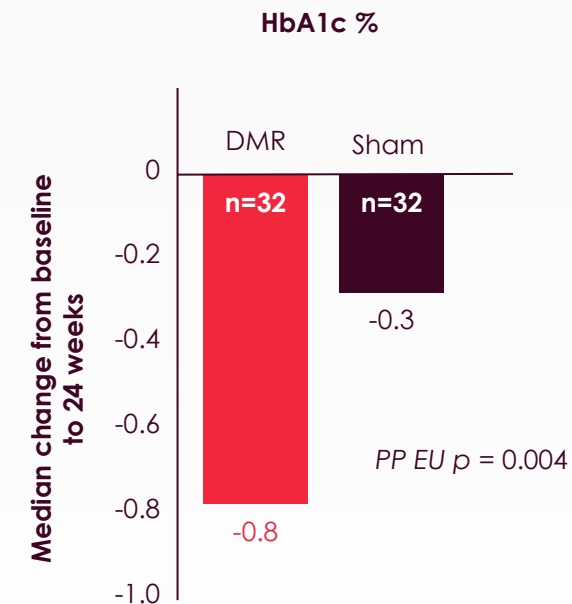
Durable Metabolic Improvements



Revita-2 Sham-Controlled³

Sham-controlled efficacy pilot study

Sham-Controlled Efficacy



1. Rajagopalan et al Diabetes Care 2016 2. van Baar et al. Diabetes Res Clin Pract. 2022 184:109194 3. Mingrone et al. Gut 2022 71:254-264

REVITALIZE-1 pivotal study underway

FDA Breakthrough Device designation and CMS reimbursement support

Patient population

- Inadequately controlled T2D (HbA1c > 7.5) despite use of at least 1 glucose lowering agent (GLA)

Co-primary endpoints

- Change from baseline in HbA1c at 24 weeks

Key secondary endpoints

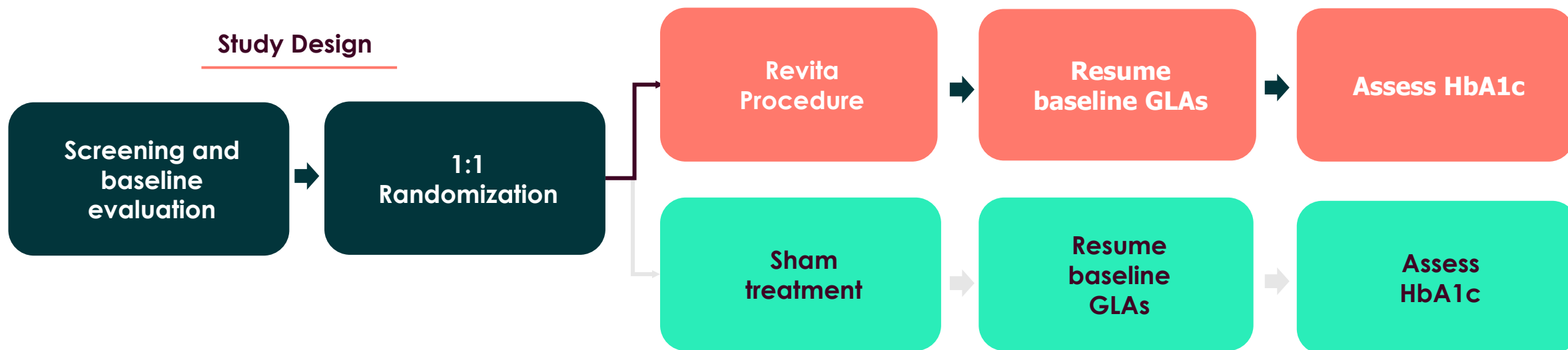
- HbA1c targets weight loss, insulin requirement

Study design

- Randomized (1:1) double blind sham controlled

Anticipated timing

Topline data mid-2025



Post-market registry ongoing in Germany

Real-world weight maintenance and blood sugar control post-Revita procedure¹

Patient population

Patients with obesity and advanced T2D on up to 3 GLA at baseline undergoing Revita + diet and exercise

Median baseline demographics

62 years age
BMI 32 kg/m²

Anticipated timing

Quarterly open label data updates

	Baseline* Median	3 Month* Median	6 Month* Median	12 Month* Median
Weight (kg)	111	101	100	97
HbA1c (%)	9.6	7.1	7.6	7.2

- Revita was well-tolerated in these registry participants with no procedure-related adverse safety events reported

*N=11 at all timepoints





Rejuva

Potentially one-and-done
pancreatic gene therapy
platform

Rejuva is a preclinical asset and has yet to be
assessed by regulatory agencies.

Pancreatic Gene Therapy (PGTx) to modify islet function

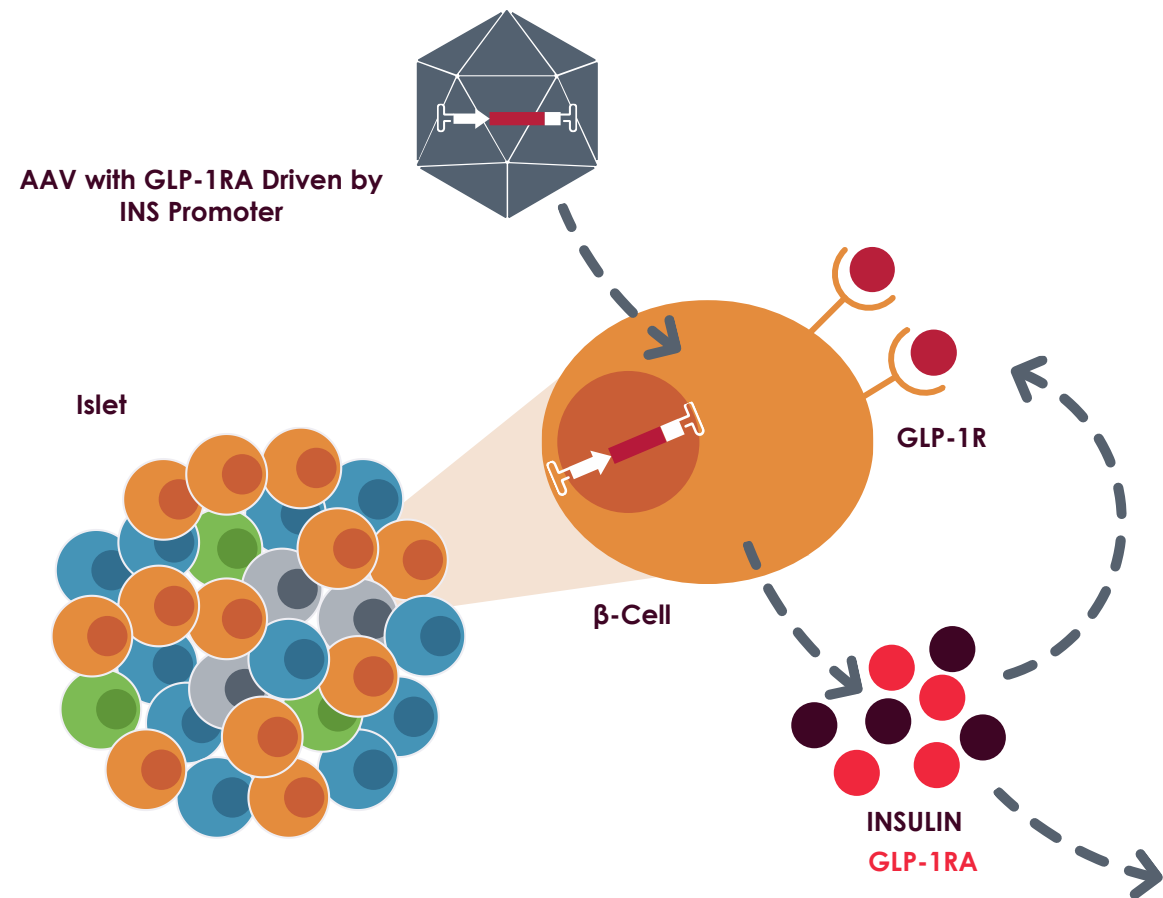
Potential for durable improvement in metabolic health

GLP-1 gene therapy, targeted to pancreatic islets, may offer differentiated benefit

β -cell machinery can be leveraged to produce nutrient-stimulated hormones^{1,2}

Islet cells are terminally differentiated,³ making adeno-associated virus (AAV) suitable for durable effect

Opportunity to amplify islet GLP-1 signaling to improve β -cell health



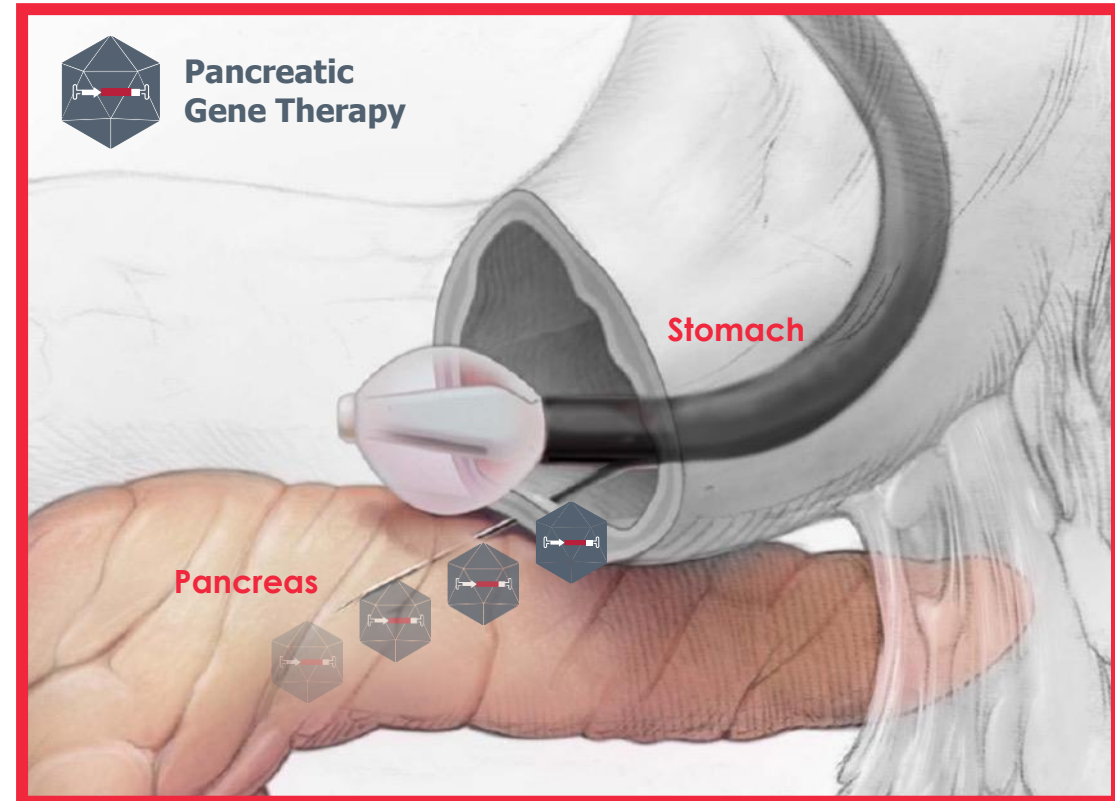
Gene therapy route of administration to pancreas

Proprietary, automated, endoscopic delivery device

Local delivery enables low viral genome dosing with limited systemic virus exposure¹

Islets are readily accessible^{2,3} via already established, routine, upper endoscopic ultrasound procedures,⁴ performed in ~300K patients per year in US⁵

Procedural risk is further mitigated with device design (e.g., needle size, volume, controlled infusion rate)



Endoscopic Procedure & PGTx Delivery



Dose-dependent transduction in Yucatan Pig Model

Local delivery effectively and reliably targets islets

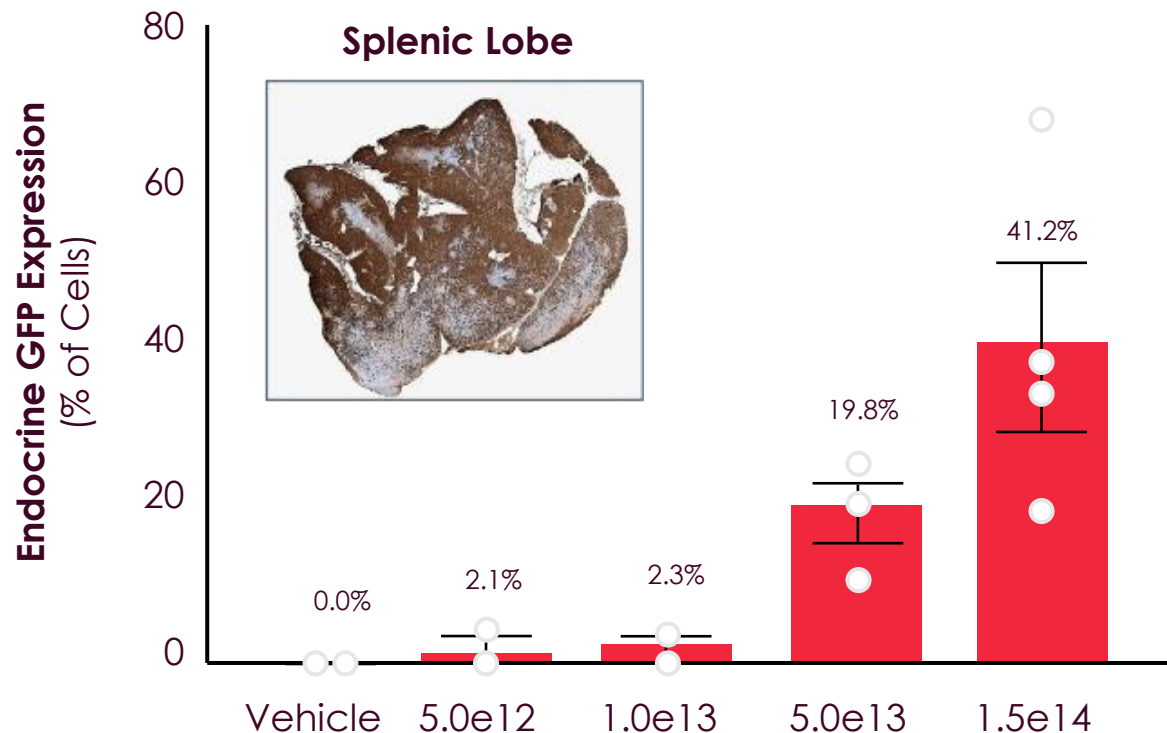
Yucatan pig model **anatomy similar to humans¹**

Dose-dependent AAV-GFP expression in targeted pancreatic lobe^{2,3}

>60 animals treated with 100% technical success

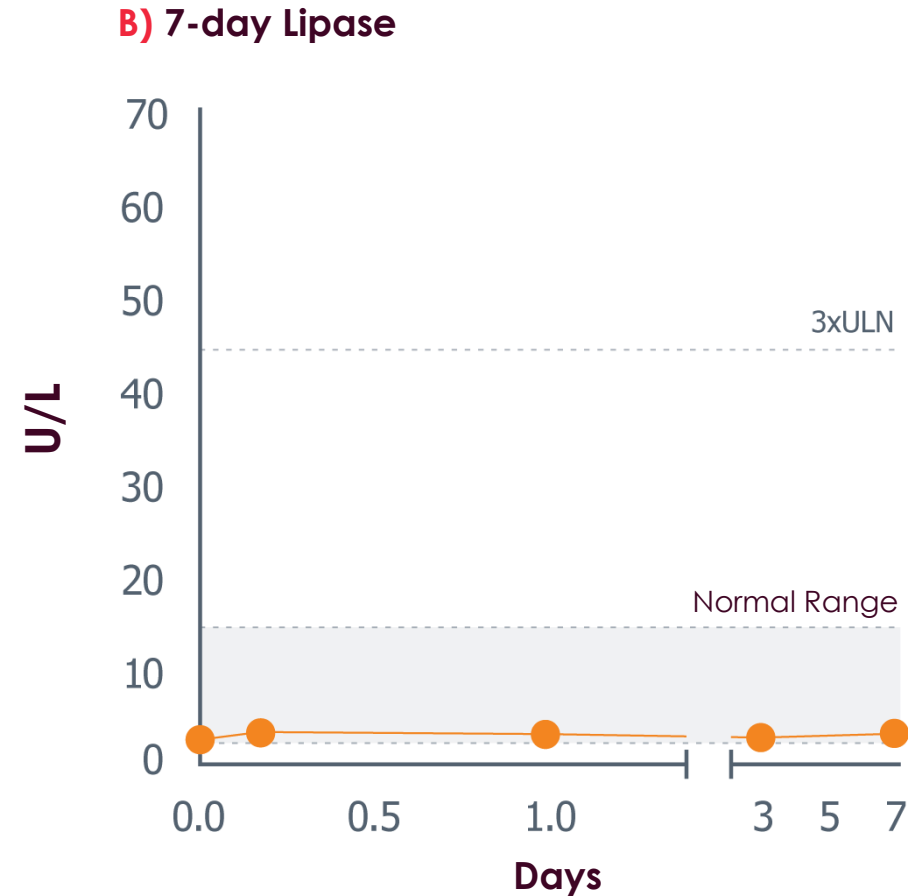
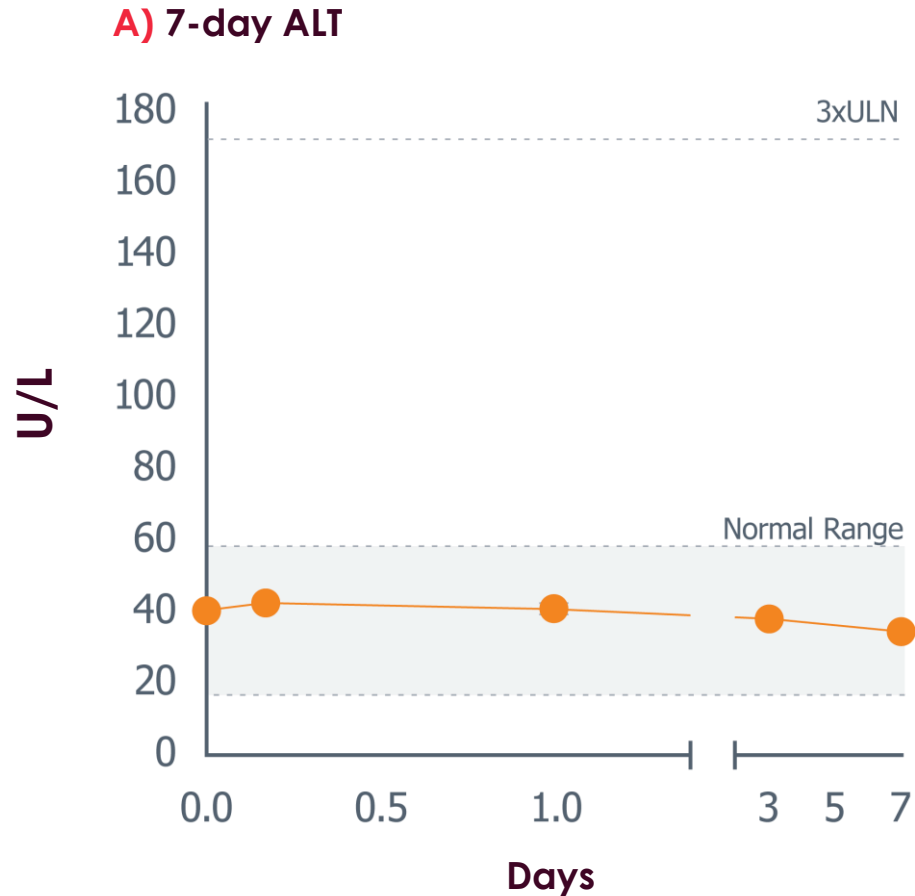
No adverse safety signals to date (e.g., pancreatitis)

Yucatan Pig Islet Transduction



Intrapancreatic AAV9: Toxicology

ALT and lipase levels within normal range across all timepoints



RJVA-001 for T2D

Nutrient-responsive “Smart” GLP-1 via intrapancreatic gene therapy

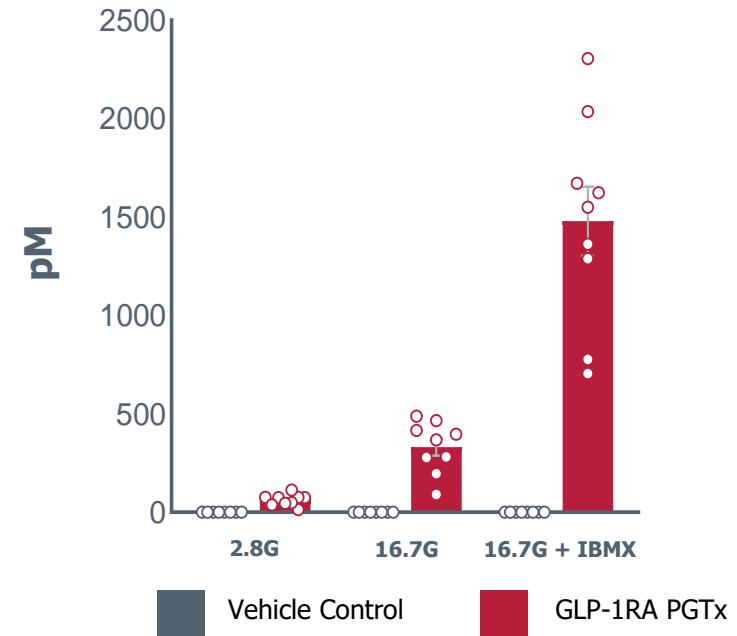
Smart GLP-1 Differentiation

- Expression regulated by the insulin promoter
- Enables nutrient-responsive GLP-1 expression
- Effectively transduces pancreatic islets
- One-time intrapancreatic administration

Product Design

- Vector: AAV9
- Transgene: human GLP-1
- Promoter: insulin
- Delivery: Proprietary endoscopic delivery

Glucose concentration-dependent release from pancreatic beta cells¹



Status

IND-enabling studies

Expected Milestone

Initiate first-in-human clinical study in H1 2025

Data show GLP-1 is only released from beta cells under high glucose conditions

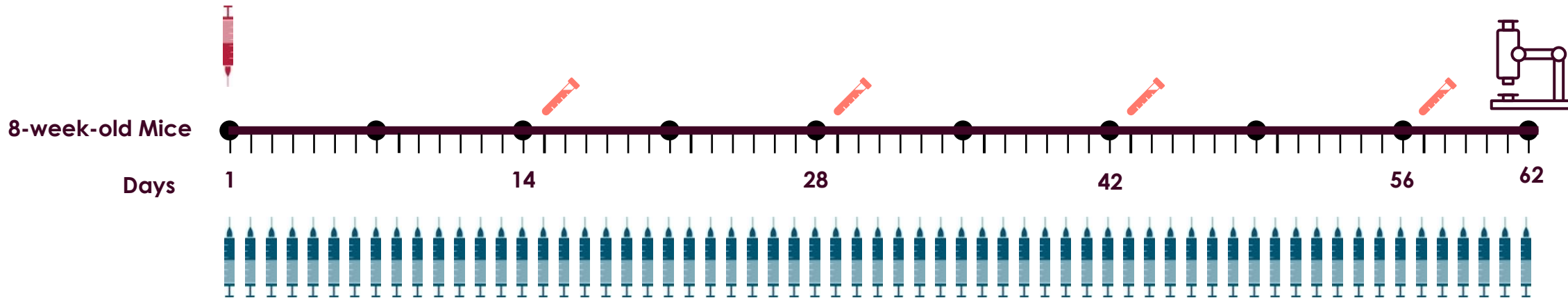


RJVA-001 prototype* vs. semaglutide

Design of POC efficacy study in db/db mouse (standard T2D model)



Single I.P. Injection
(5e12 VG GLP-1-based PGTx or Vehicle)



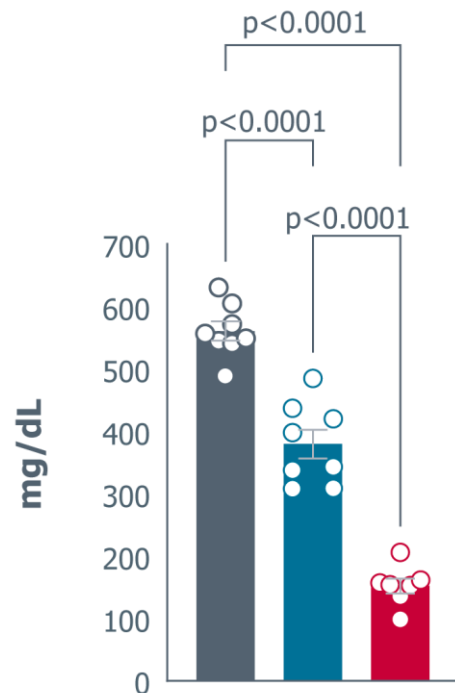
Daily S.C. Injections
Semaglutide (10 nmol/kg/d) or Vehicle



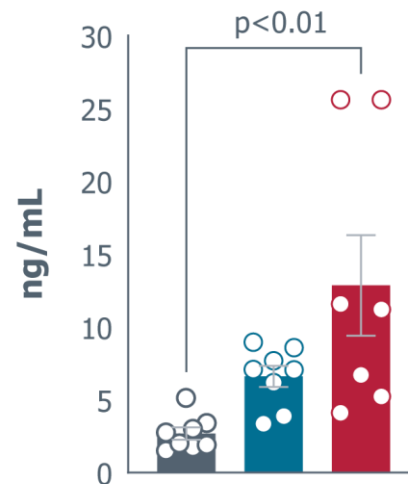
Glucose-lowering efficacy in *db/db* murine model

GLP-1RA PGTx improves glucose and weight vs. daily semaglutide

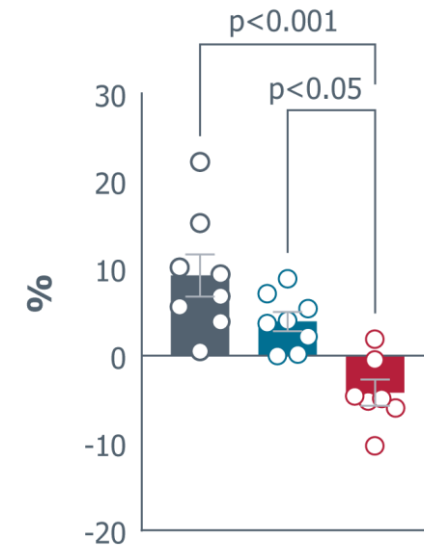
A) Fasting Blood Glucose



B) Fasting Plasma Insulin



C) Body Weight Change from Baseline



Vehicle Control

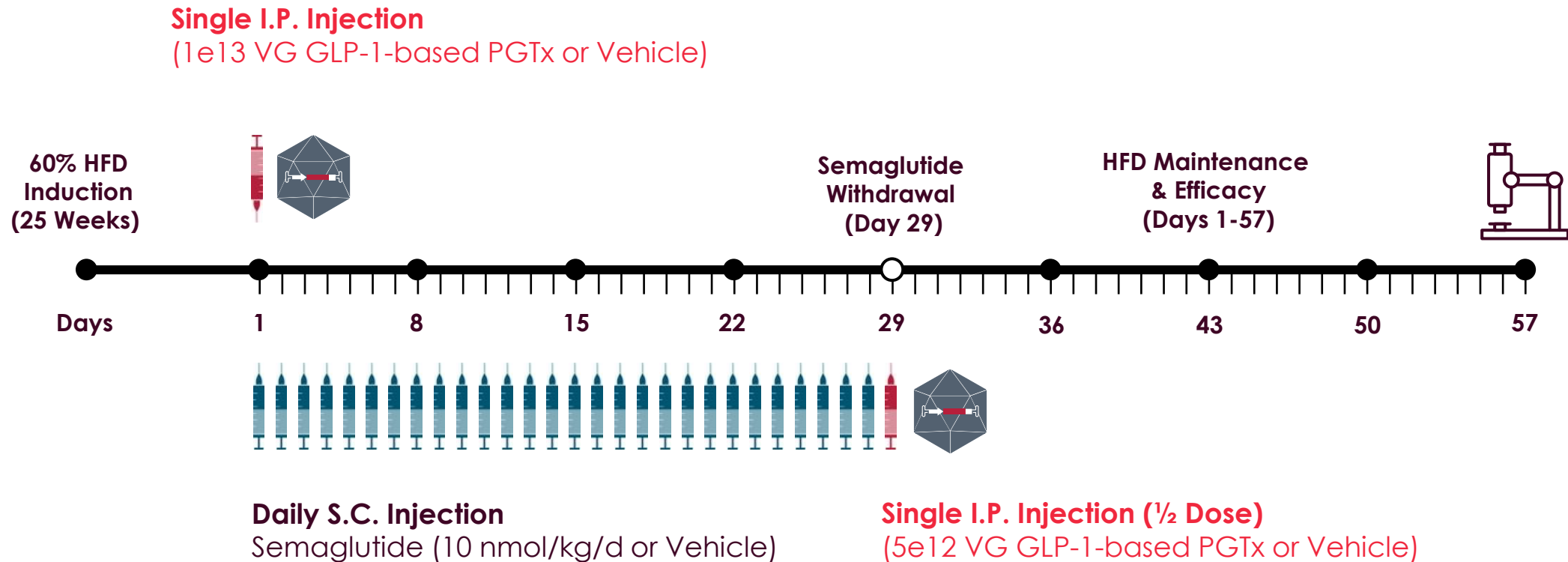
Semaglutide (10 nmol/kg/d)

GLP-1RA PGTx (5e12)



RJVA-001 prototype* vs. semaglutide

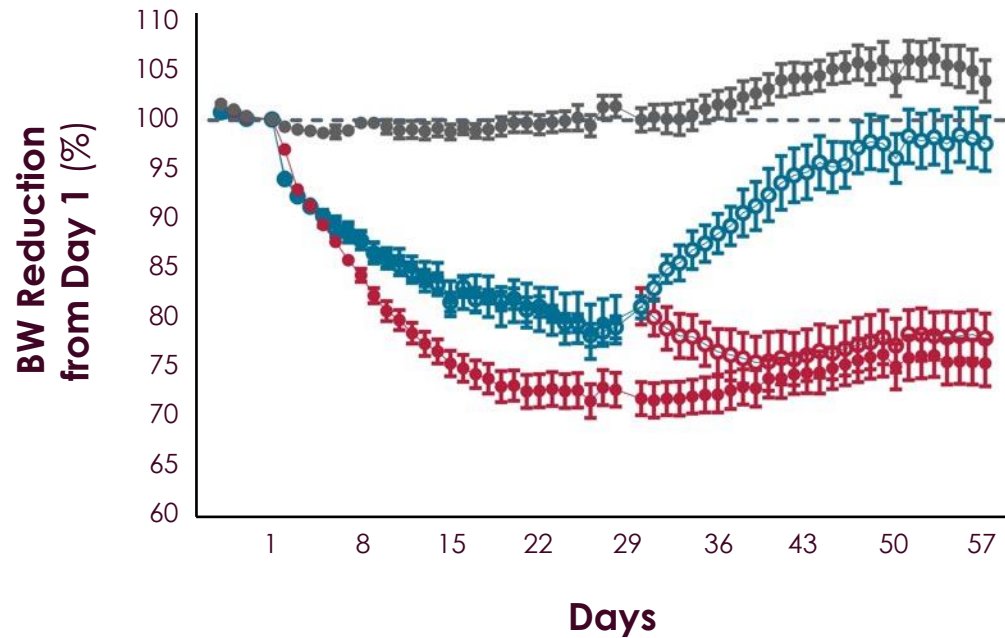
Design of POC efficacy study in DIO mouse (standard obesity model)



RJVA-001 prototype* vs. semaglutide

Weight loss and food intake in DIO mouse model

A) Change in BW Over Time



Vehicle Control

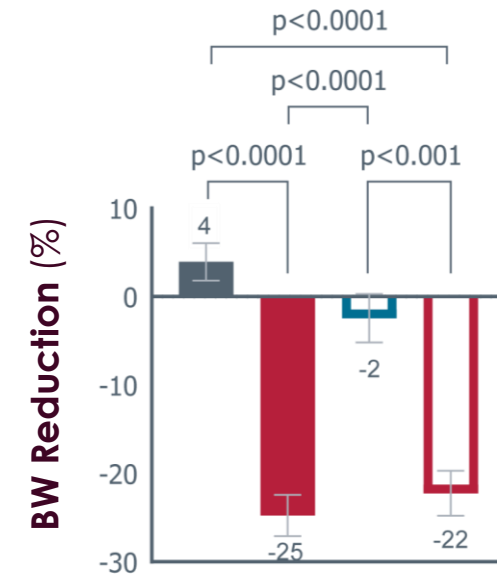
Sema (10 nmol/kg/d)

Sema Withdrawal + Vehicle

GLP-1RA PGTx (1e13 VG)

Sema Withdrawal + GLP-1RA PGTx (5e12 VG)

B) End of Study BW Change



RJVA-001 summary

Nutrient-responsive GLP-1
via intrapancreatic gene
therapy



Utilizes Fractyl's proprietary intrapancreatic delivery system – invented to enable local delivery of pancreatic gene therapy vectors



Designed for improved potency and tolerability compared to other approaches



Efficacy in db/db and DIO mouse models of T2D and obesity superior to chronic semaglutide



Regulatory alignment on IND-enabling studies for T2D FIH study



RJVA-001 candidate nominated in H1 2024



First-in-human clinical study initiation in T2D expected in H1 2025



Leadership team and BOD

Experience spanning biotechnology and medical technology



Harith Rajagopalan, MD, Ph.D.
Co-founder & CEO



Jay Caplan
Co-founder, President,
Chief Product Officer



Tim Kieffer, Ph.D.
Chief Scientific Officer



Adrian Kimber
Chief Commercial Officer



Lisa Davidson
Chief Financial Officer



Sarah Toomey
General Counsel and
Corporate Secretary

Board of Directors

Ajay Royan (Chair)
Co-founder and Managing General Partner, Mithril

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Former U.S. Senator

Harith Rajagopalan, MD, PhD
Co-founder & CEO, Fractyl Health

Marc Elia
Founder of M28 Capital

Kelly Barnes
Former Partner, PwC

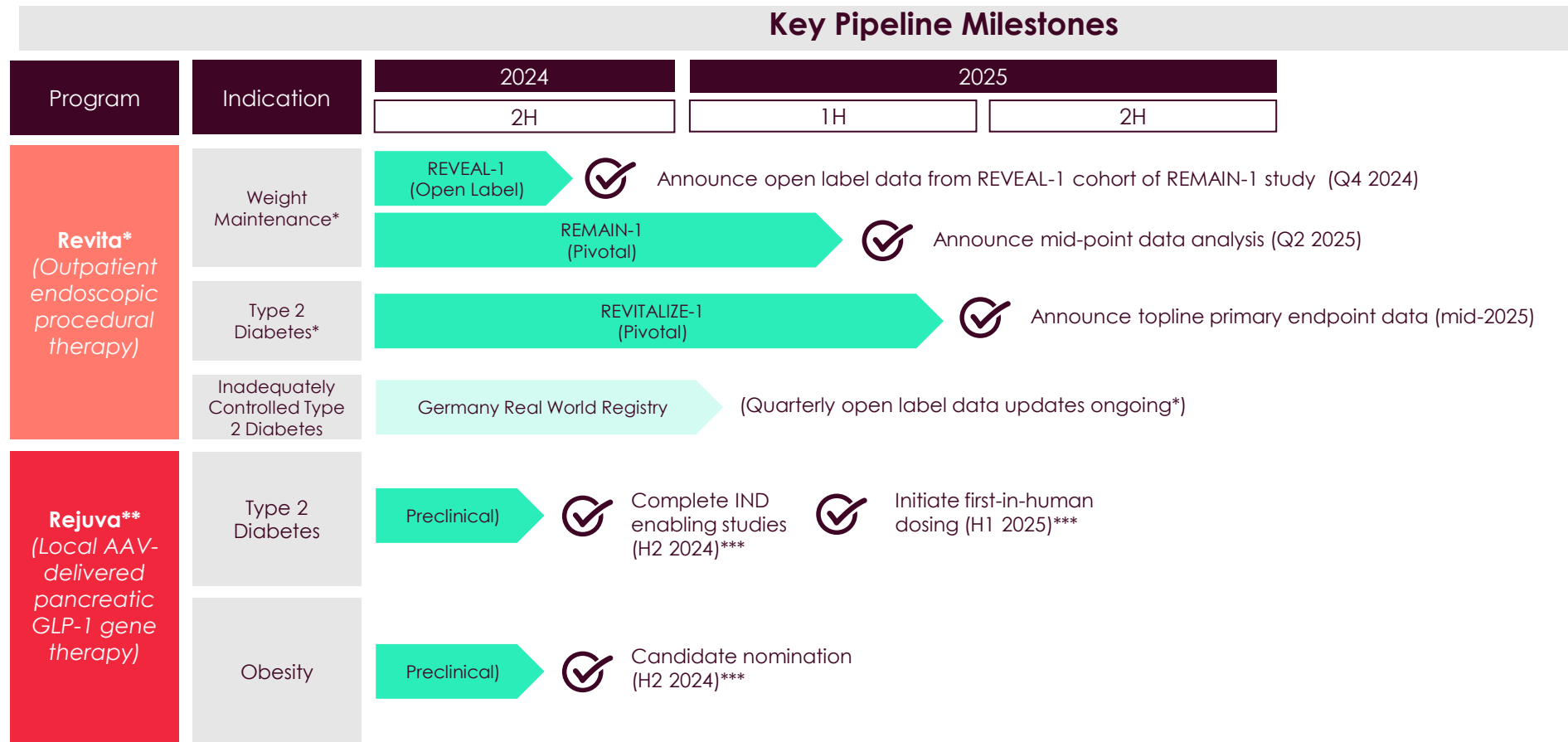
Sam Conaway
President of Boston Scientific U.S. Cardiology Sales and
Chair of Close the Gap

Clive Meanwell, MB, CHB, MD
Executive Chairman and Founder of Population Health Partners

Amy Schulman
Partner, Polaris Partners



Building on significant opportunity with value-driving execution across pipeline in 2024



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Thank You!

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