



DIABETES & OBESITY

Lilly



SAFE HARBOR PROVISION



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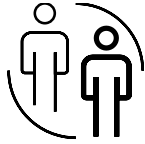
Vice President, Diabetes
Product Development



2021 INVESTMENT COMMUNITY MEETING

UNMET NEEDS

CURRENT PATIENT OUTCOMES ARE NOT ACCEPTABLE



Over 100 million people in the US have obesity



In the US, **less than 3%** of people with obesity are pharmacologically treated for obesity. The economic impact associated with obesity is over **\$1 trillion dollars**.



Obesity is the **leading risk factor for type 2 diabetes** and other metabolic diseases



One out of two people with diabetes do not meet treatment goals for glucose lowering (HbA1c)



One person dies from diabetes and its complications **every eight seconds and obesity is a cause for nearly 1 out of 5 adult deaths**

INNOVATION DRIVES EXPANDED STRATEGIC FOCUS

DIABETES AND OBESITY

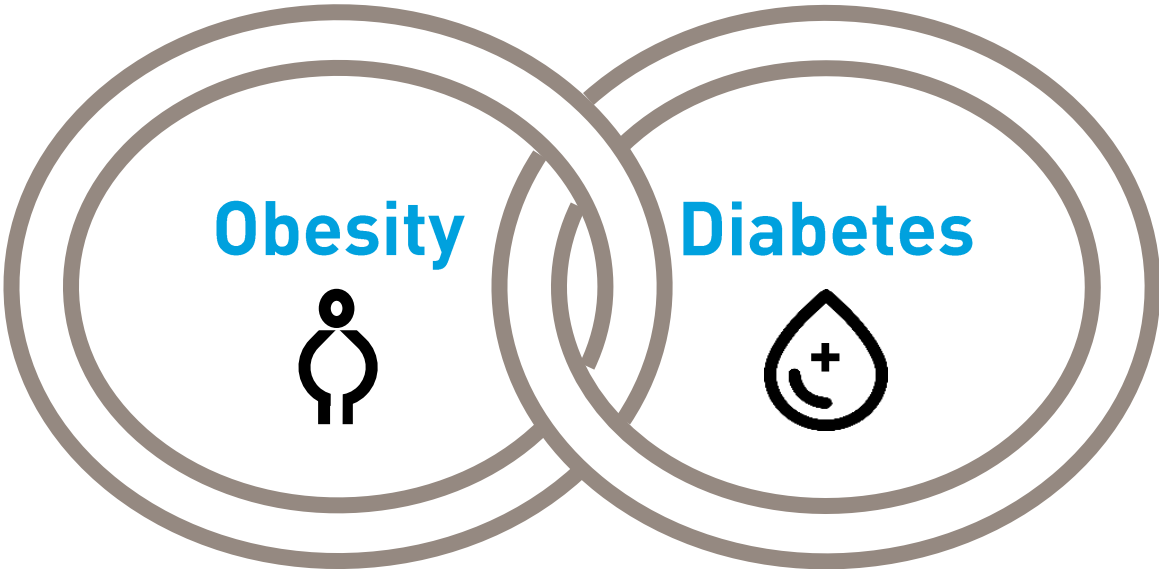


OUR FOUNDATION



Improving and simplifying
glycemic control

OUR EXPANDED FOCUS

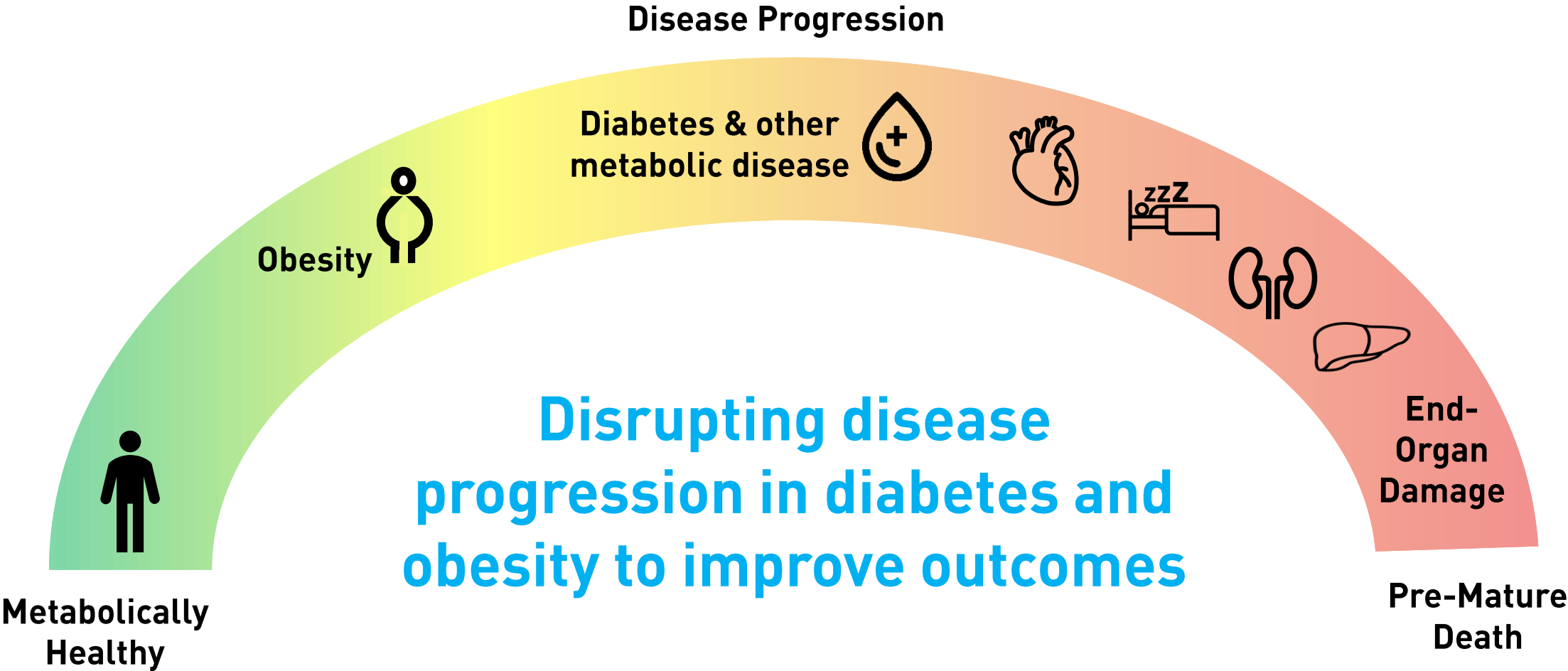


Disrupting disease progression in
Diabetes & Obesity to improve outcomes



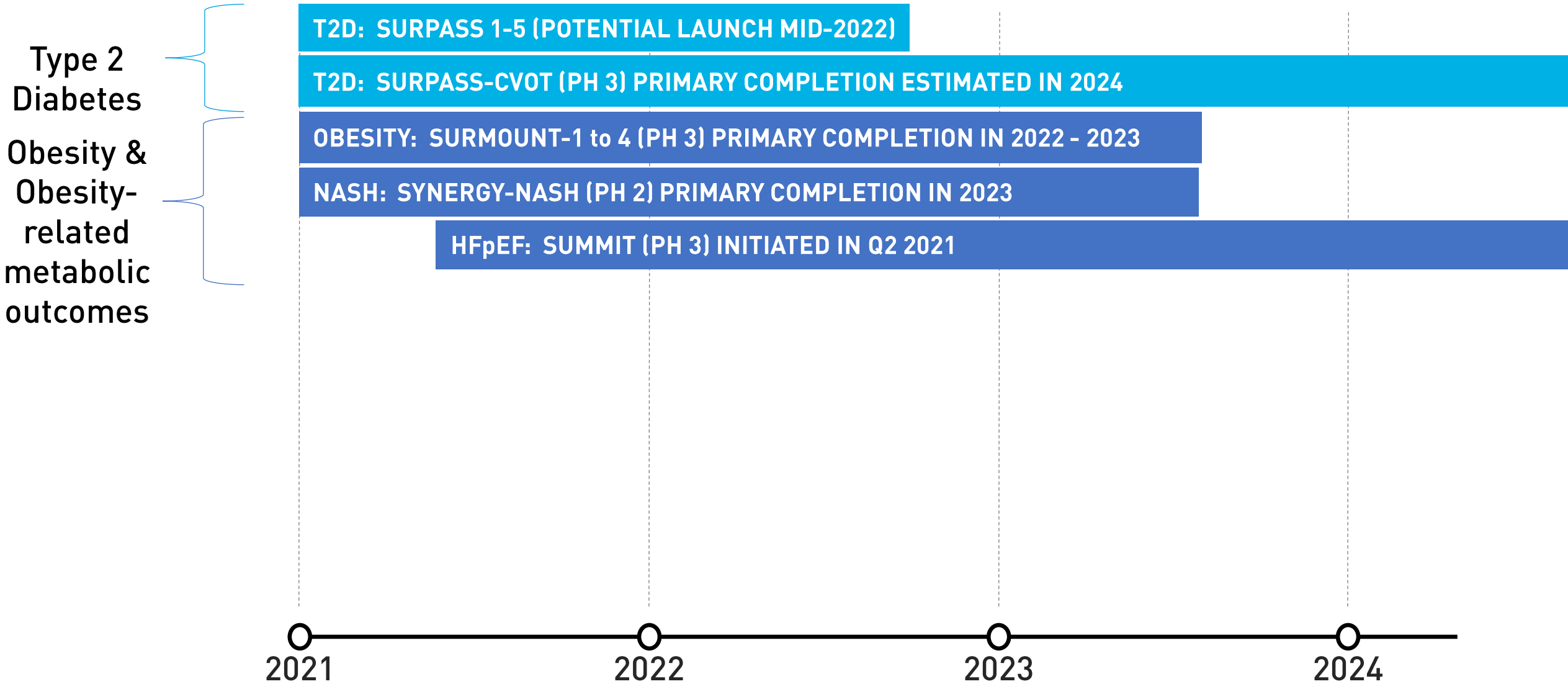
MOVING EARLIER IN THE DISEASE CASCADE

TREATING OBESITY TO REDUCE METABOLIC DISEASES AND COMPLICATIONS



TIRZEPATIDE CLINICAL DEVELOPMENT PROGRAM

HARNESSING TIRZEPATIDE EFFICACY TO EXPAND ITS POTENTIAL BENEFITS FOR PATIENTS



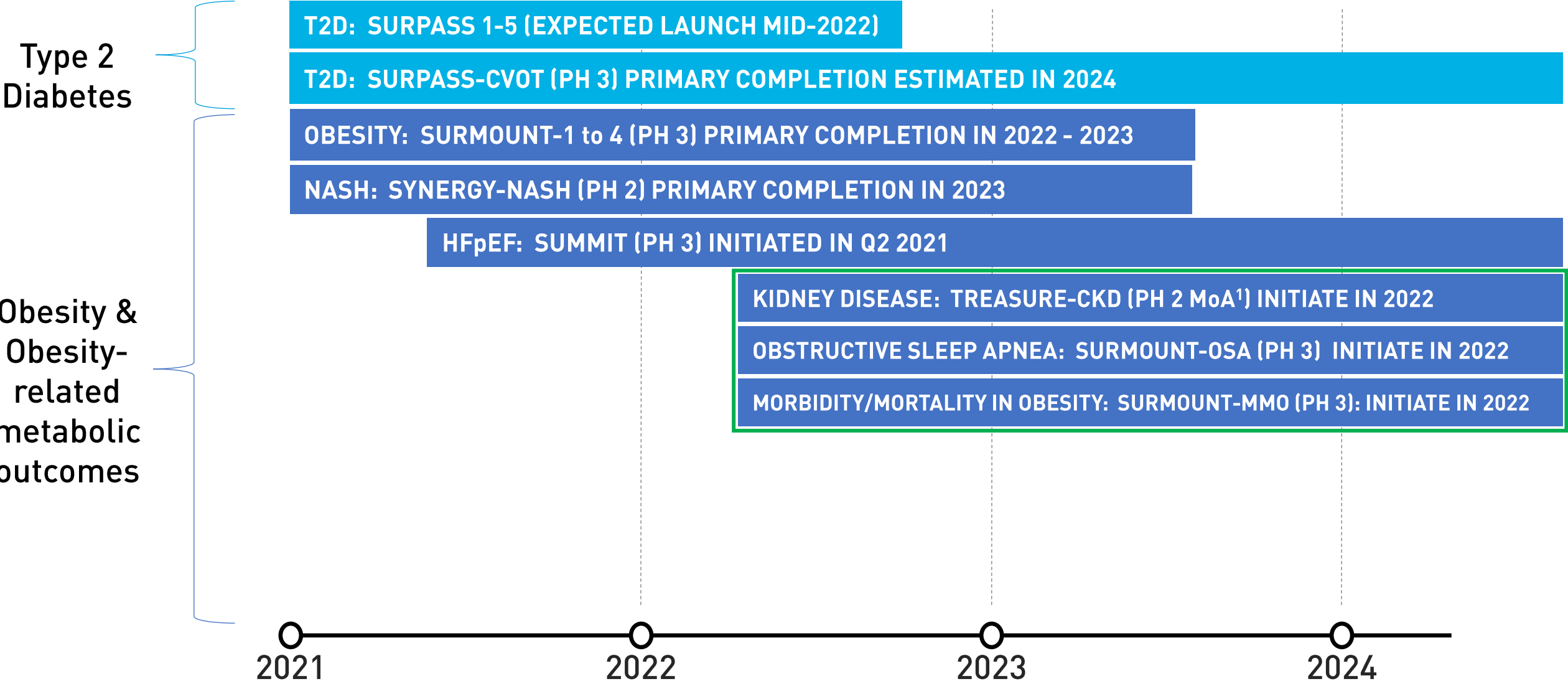
Progressing trials in type 2 diabetes as well as other serious chronic diseases

T2D = Type 2 Diabetes; CVOT = Cardiovascular Outcomes; NASH = Non-Alcoholic Steatohepatitis; HFpEF = Heart Failure with preserved Ejection Fraction

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TIRZEPATIDE CLINICAL DEVELOPMENT PROGRAM

HARNESSING TIRZEPATIDE EFFICACY TO EXPAND ITS POTENTIAL BENEFITS FOR PATIENTS



Plan to initiate studies in Obesity Outcomes (Phase 3), Obstructive Sleep Apnea (Phase 3), and Kidney Disease (Phase 2 MoA) in 2022 to bolster tirzepatide’s development program

¹ Not an outcomes study; T2D = Type 2 Diabetes; CVOT = Cardiovascular Outcomes; NASH = Non-Alcoholic Steatohepatitis; HFpEF = Heart Failure with preserved Ejection Fraction; CKD/DKD = Chronic Kidney Disease/Diabetic Kidney Disease; MoA = Mechanism of Action; OSA = Obstructive Sleep Apnea

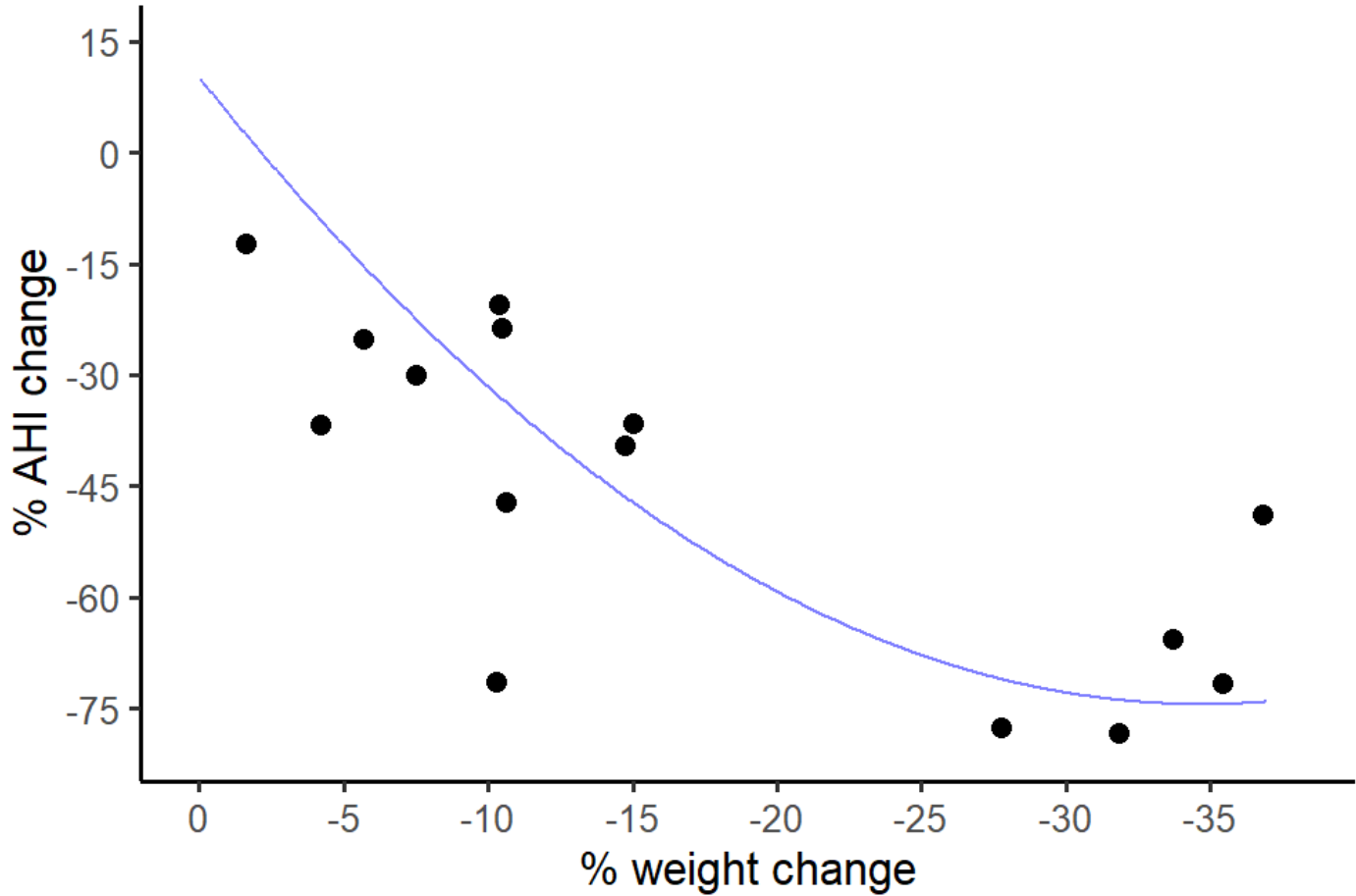
MORBIDITY AND MORTALITY IN OBESITY

LEVERAGE TIRZEPATIDE'S WEIGHT LOSS TO STUDY POTENTIAL BENEFIT FOR OBSTRUCTIVE SLEEP APNEA



WEIGHT LOSS IMPROVES OSA

OSA OPPORTUNITY



Blue line represents internal modeling based on meta-analysis of weight-loss and bariatric surgery literature
Dots represent published individual study results
AHI = Apnea-Hypopnea Index

- Obstructive Sleep Apnea (OSA) is a breathing disorder characterized by narrowing of the upper airway impairing normal ventilation during sleep¹
 - 60-90% of people with OSA are overweight or living with obesity
 - OSA is a largely undiagnosed, modifiable CVD risk factor
 - Positive Airway Pressure (PAP), the current standard-of-care for OSA, has failed to show improvements in non-sleep-related OSA outcomes such as MI, stroke, diabetes and depression
 - Weight loss can provide meaningful improvements in OSA
- Tirzepatide has the potential to improve the following conditions associated with OSA²
 - Obesity
 - Upper airway dysfunction
 - Respiratory control instability

¹Kapur V. 2017 J Clin Sleep Med; Pillar G. 2008 Diabetes Care; ²Javaheri S. 2017 J Am Coll Cardiol

MORBIDITY AND MORTALITY IN OBESITY

LEVERAGE TIRZEPATIDE'S WEIGHT LOSS TO PURSUE CLINICALLY MEANINGFUL OUTCOMES



BENEFITS FROM SIGNIFICANT WEIGHT LOSS

EVENTS	RESOLUTION/REDUCTION
Dyslipidemia, hypercholesterolemia	65% resolved
Mortality	30-40% reduction in 10 years
Metabolic syndrome	65% resolved
Type 2 diabetes mellitus	73% resolved
Cardiovascular disease	44-74% risk reduction
Hypertension	63% resolved
Non-alcoholic fatty liver disease	90% improved steatosis 37% resolution of inflammation 20% resolution of fibrosis
Degenerative joint diseases	41-76% resolved

Source: Nor Hanipah Z. 2020 Annu Rev Med
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OBESITY OUTCOMES OPPORTUNITY

- Estimated 4 million global deaths and loss of 120 million disability-adjusted life-years in 2015 related to high BMI
 - Cardiovascular disease (~68% deaths)
 - Ischemic heart disease
 - Ischemic and hemorrhagic stroke
 - Hypertensive heart disease
 - Heart failure
 - Chronic kidney disease (~7.5% deaths)
 - Cancer (~10% deaths)
- Obesity is one of the major risk factors for the development of type 2 diabetes

Source: GBD 2015 Obesity Collaborators 2017 N Engl J Med

INSIGHT INTO TIRZEPATIDE'S MECHANISM OF ACTION

AMBITIOUS PROGRAM OF PRECLINICAL AND CLINICAL STUDIES TO UNDERSTAND MOA



BETA CELL FUNCTION

TZP enhances first phase insulin secretion and improves beta cell function
GIP potentiates insulin secretion in response to a meal

WEIGHT LOSS

TZP decreases food intake and appetite
TZP increases energy expenditure*
GIP modulates GLP-1-induced weight loss and nausea*

INSULIN SENSITIVITY

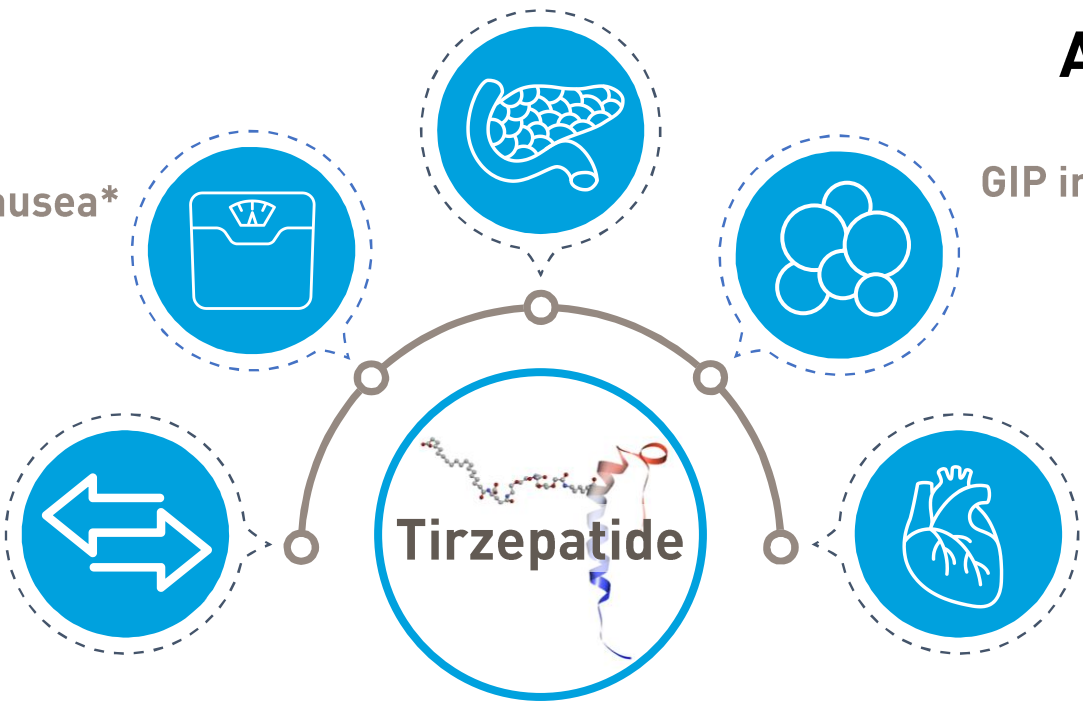
TZP improves insulin sensitivity
GIP mediates weight-independent insulin sensitization*

ADIPOSE TISSUE METABOLISM

GIP enhances FFA and glucose uptake
GIP improves metabolic flexibility and lipid partitioning*

CARDIOVASCULAR

TZP improves lipoproteins and biomarkers of vascular inflammation
Recent genetic data consistent with a beneficial role for GIP



Note: References included in Appendix; * shown in preclinical models; MoA = Mechanism of Action; TZP = tirzepatide; GIP = Glucose-dependent Insulinotropic Polypeptide; FFA = Free Fatty Acids

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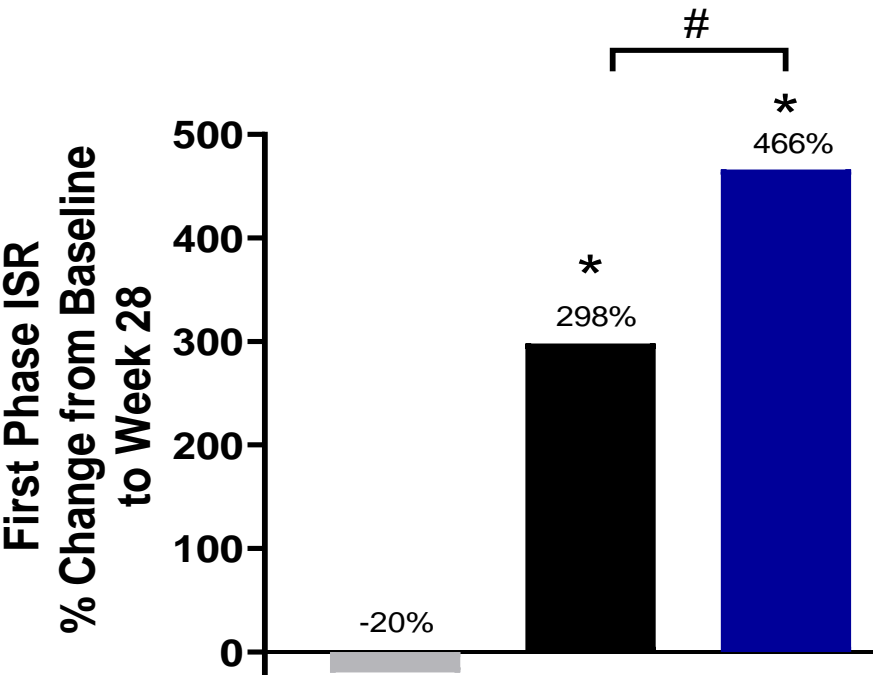
INSIGHT INTO TIRZEPATIDE'S MECHANISM OF ACTION

IMPROVEMENT IN BETA CELL FUNCTION AND INSULIN SENSITIVITY



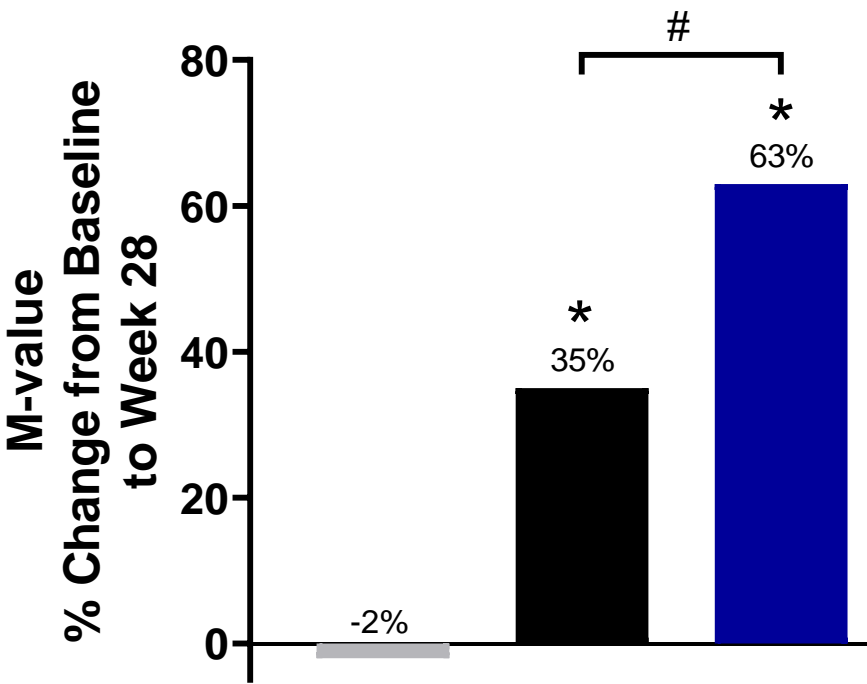
FIRST PHASE INSULIN SECRETION

Derived by hyperglycemic clamp, first 8 min



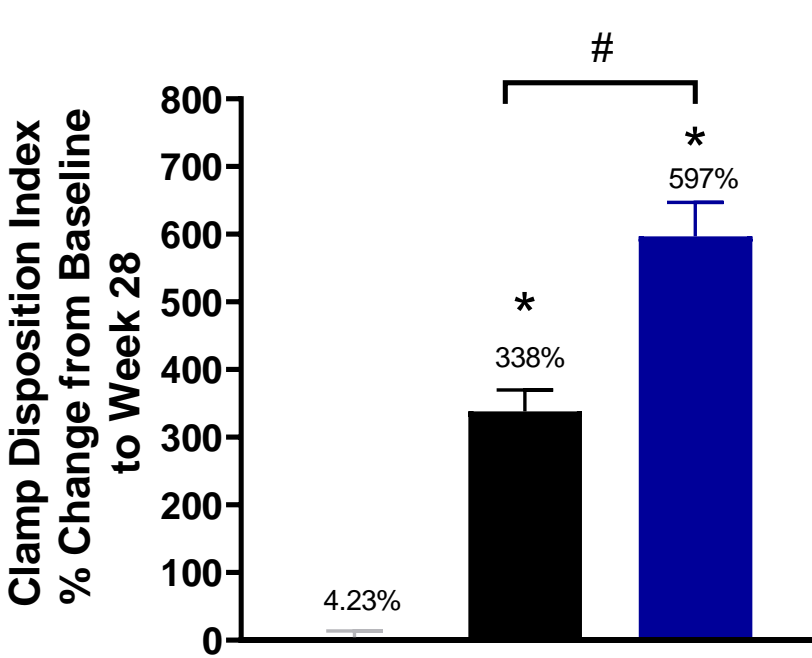
WHOLE-BODY INSULIN SENSITIVITY

Derived by glucose disposal during hyperinsulinemic euglycemic clamp



DISPOSITION INDEX

Clamp derived β -cell function adjusted for insulin sensitivity



■ Placebo ■ Semaglutide 1.0mg ■ Tirzepatide 15mg

Marked improvements in two key pathologies of T2D (insulin secretion and insulin sensitivity)

Enhanced β -cell function

TZP demonstrated pronounced effect compared to the selective GLP-1 RA semaglutide (1mg)

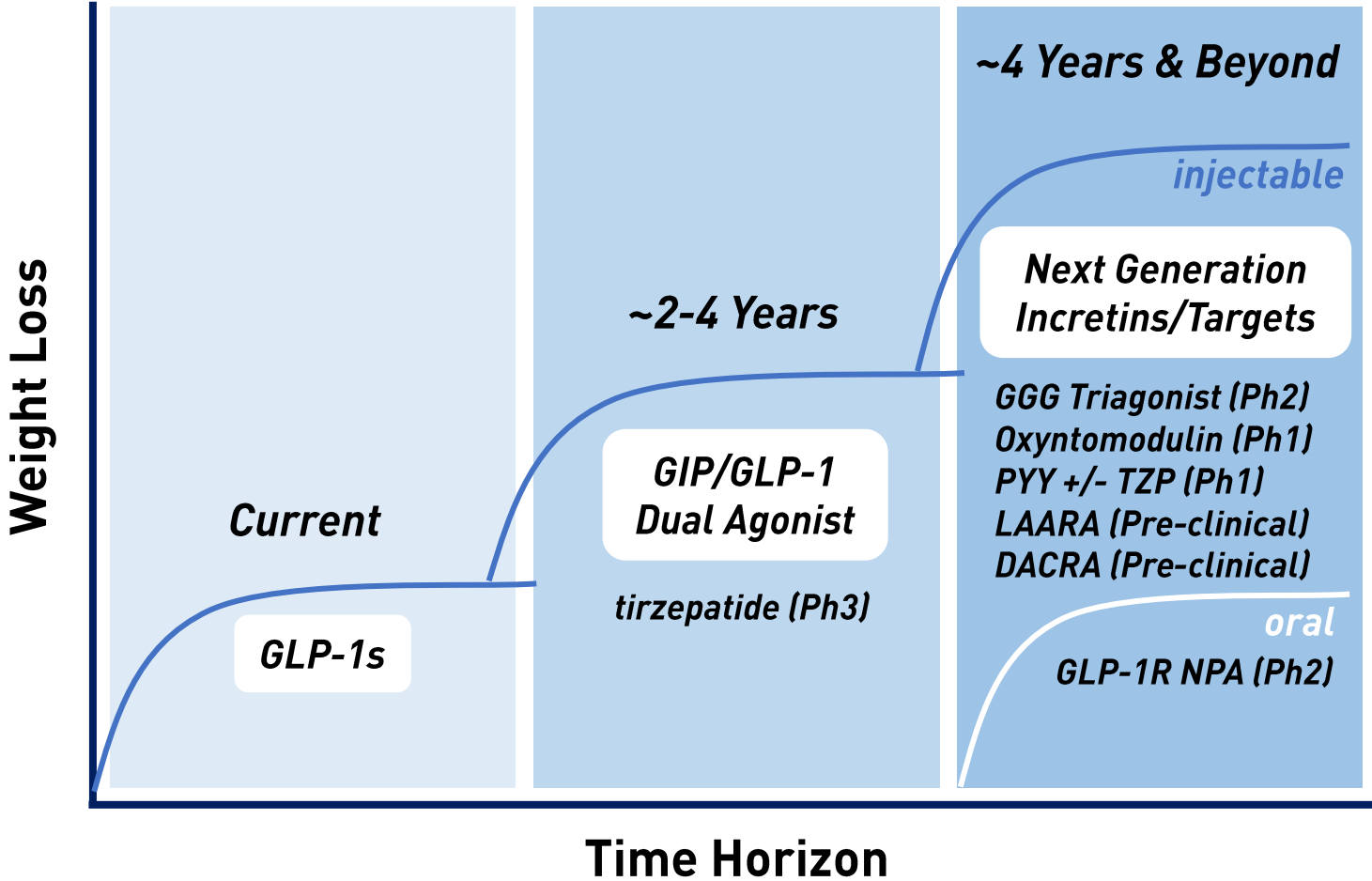
Note: References included in Appendix; T2D = Type 2 Diabetes; TZP = tirzepatide; GLP-1 RA = Glucagon-Like Peptide-1 Receptor Agonists; β -cell = Beta-cell

ENGAGING MULTIPLE MECHANISMS TO REVERSE OBESITY

ACHIEVE BARIATRIC SURGERY-LIKE WEIGHT LOSS WITH ASSOCIATED METABOLIC BENEFITS



STRONG CLINICAL PIPELINE



OPPORTUNITY IN OBESITY

- Multiple opportunities to address high unmet need
 - tirzepatide has demonstrated impressive weight loss in T2D; excited for SURMOUNT trials to read out starting in 2022
 - Mid-term opportunity includes innovation in incretins and combination products with TZP
 - Broad pre-clinical pipeline behind these assets benefitting from partnering with leading incretin for improved outcomes
- High bar set for differentiation (tirzepatide as a benchmark)
 - Aim for healthy fat mass and improved clinical outcomes

GGG = GIP, GLP-1 and Glucagon; PYY = Peptide tyrosine tyrosine; TZP = tirzepatide; LAARA = Long-Acting Amylin Receptor Agonist; DACRA = Dual Amylin and Calcitonin Receptor Agonist; Oxyntomodulin partnered with Innovent in China

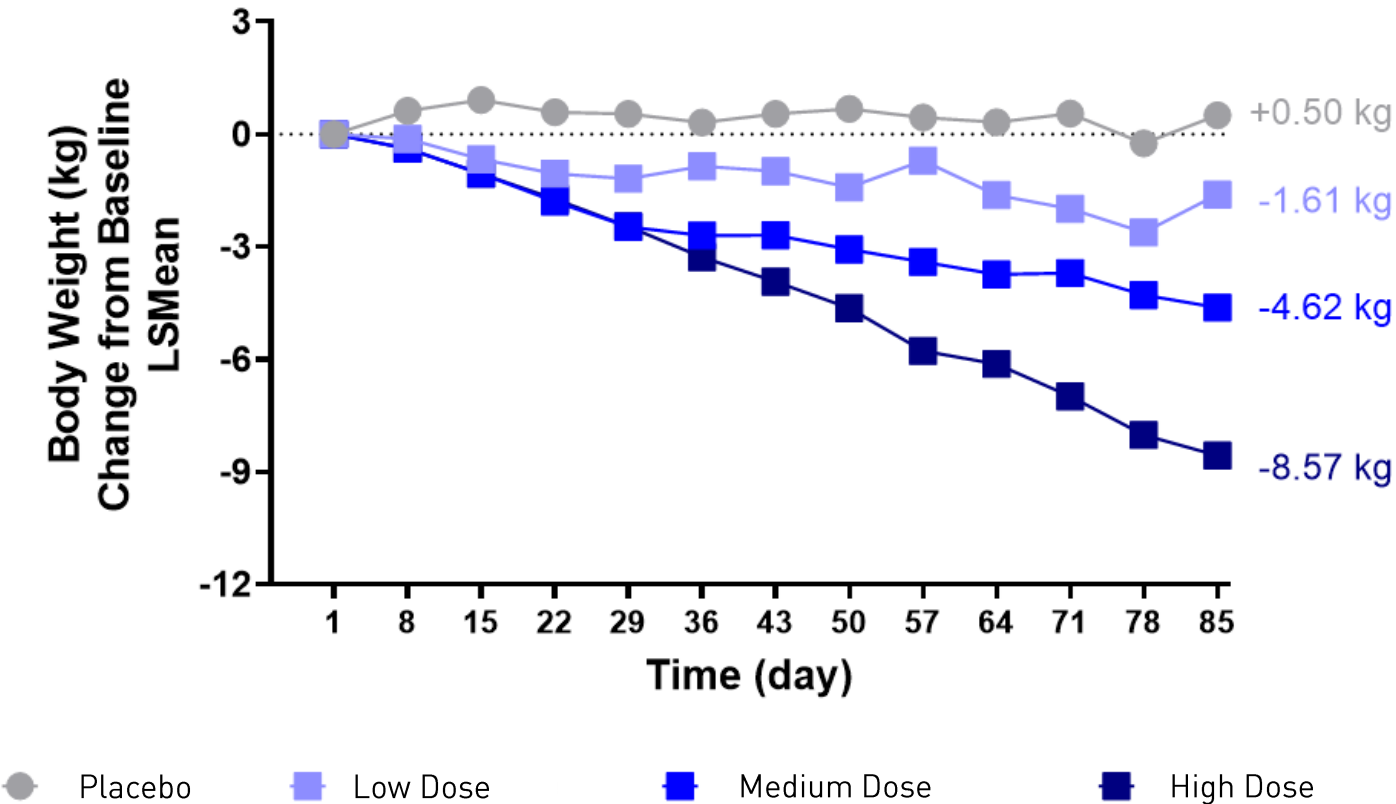
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GIP, GLP-1 AND GLUCAGON TRIPLE RECEPTOR AGONIST (GGG)

PHASE 1 DATA SUPPORT POTENTIAL FOR BARIATRIC SURGERY LIKE WEIGHT LOSS



12-WEEK PROOF OF CONCEPT IN T2D



DIFFERENTIATED WEIGHT LOSS

- GGG (LY3437943) is a single peptide derived from a GIP peptide backbone with triple-agonist activity for GIP, GLP-1, and glucagon receptors. Acylation allows weekly SC dosing.
- Goal is to maintain TZP pharmacology and add glucagon receptor activation to achieve differentiated weight loss and other metabolic health benefits
- 12-week MAD/PoC study in T2D:
 - ~9 kg weight loss (TZP achieved ~5.5 kg weight loss in similar studies)
 - Robust glucose control (similar to TZP)
 - Safety and tolerability consistent with GLP-1 RA
- Phase 2 studies in obesity and T2D in progress

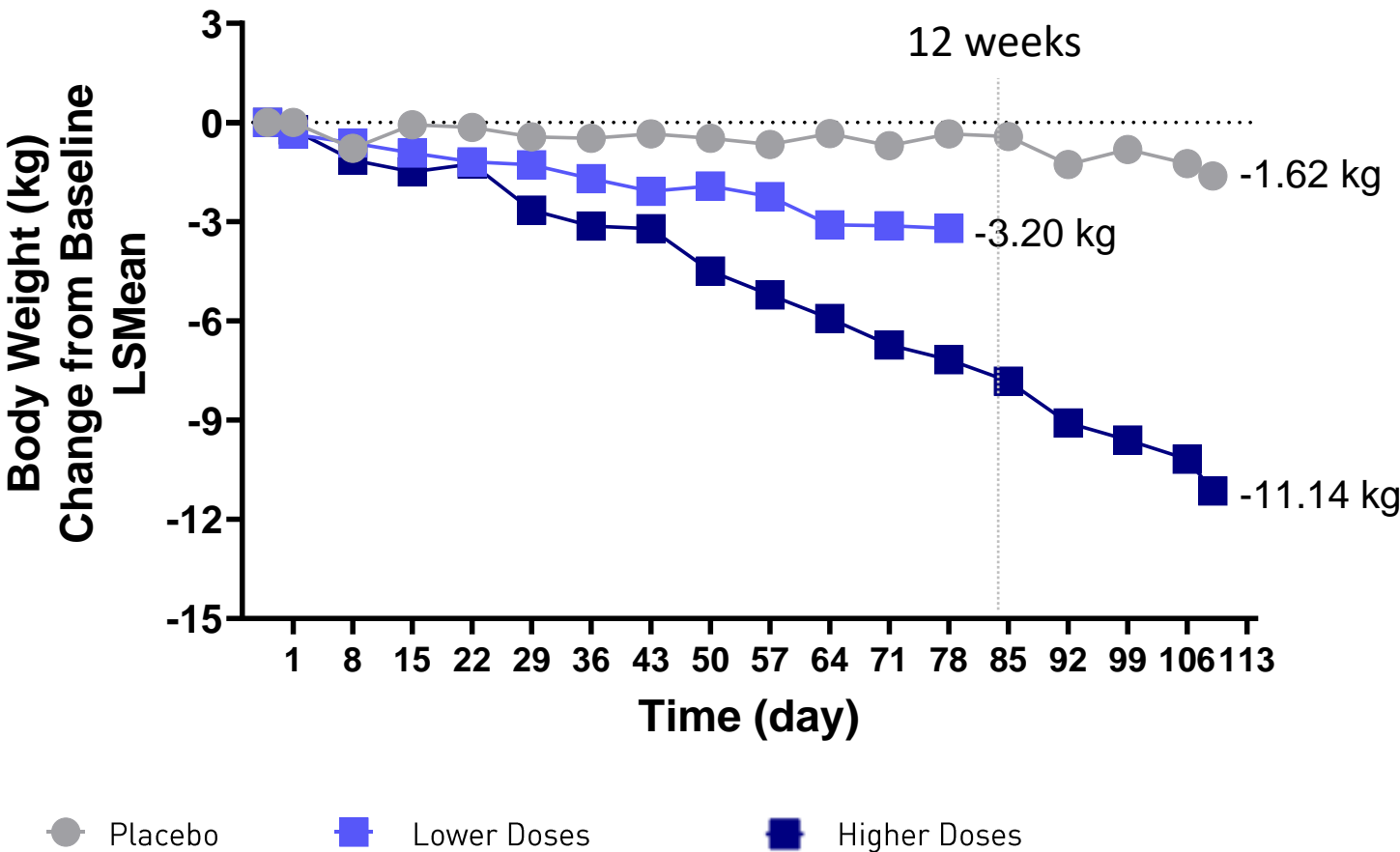
Not all arms are shown in the graph above; SC = Subcutaneous; TZP = tirzepatide; MAD = Multiple Ascending Dose; PoC = Proof of Concept; GLP-1 RA = Glucagon-Like Peptide-1 Receptor Agonists; T2D = Type 2 Diabetes

OXYNTOMODULIN (OXM)

PHASE 1 DATA SUPPORT POTENTIAL FOR BARIATRIC SURGERY-LIKE WEIGHT LOSS



16-WEEK PROOF OF CONCEPT IN T2D



DIFFERENTIATED WEIGHT LOSS

- OXM is a single peptide derived from a glucagon peptide backbone with dual-agonist activity for GLP-1 and glucagon receptors. Acylation allows weekly SC dosing.
- Goal is to add glucagon receptor activation to achieve differentiated weight loss and other metabolic health benefit in obese subjects
- 16-week MAD/PoC study in T2D:
 - ~8 kg weight loss at 12 weeks, ~11 kg at 16 weeks
 - Robust glucose control (similar to TZP)
 - Safety and tolerability consistent with GLP-1 RA

SC = Subcutaneous; TZP = tirzepatide; MAD = Multiple Ascending Dose; PoC = Proof of Concept; GLP-1 RA = Glucagon-Like Peptide-1 Receptor Agonists; T2D = Type 2 Diabetes; Oxyntomodulin partnered with Innovent in China

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SMALL MOLECULE ORAL INCRETINS

EXPANDING REACH OF THE GLP-1 MECHANISM FOR PATIENTS WITH DIABETES & OBESITY



OPPORTUNITY TO EXPAND REACH

- Option for patients unwilling to take an injection
- Aiming for efficacy similar to or better than injectable GLP-1 analogs
- Easier to use than currently available oral incretin option
- Potential for increased global adoption

LILLY'S GLP-1R NPA

- GLP-1R NPA (LY3502970) is Lilly's most advanced oral incretin, aiming to treat both T2D and obesity
- As a selective, partial and biased agonist at the GLP-1 receptor, this molecule is differentiated compared to other GLP-1R NPAs
- A small molecule with expected features vs. oral peptide including:
 - Better bioavailability,
 - Better manufacturing cost structure, and
 - Easier administration with no requirement for a fast

Note: GLP-1R NPA (LY3502970) is licensed from Chugai; GLP-1R NPA = GLP-1 receptor non-peptidic agonist

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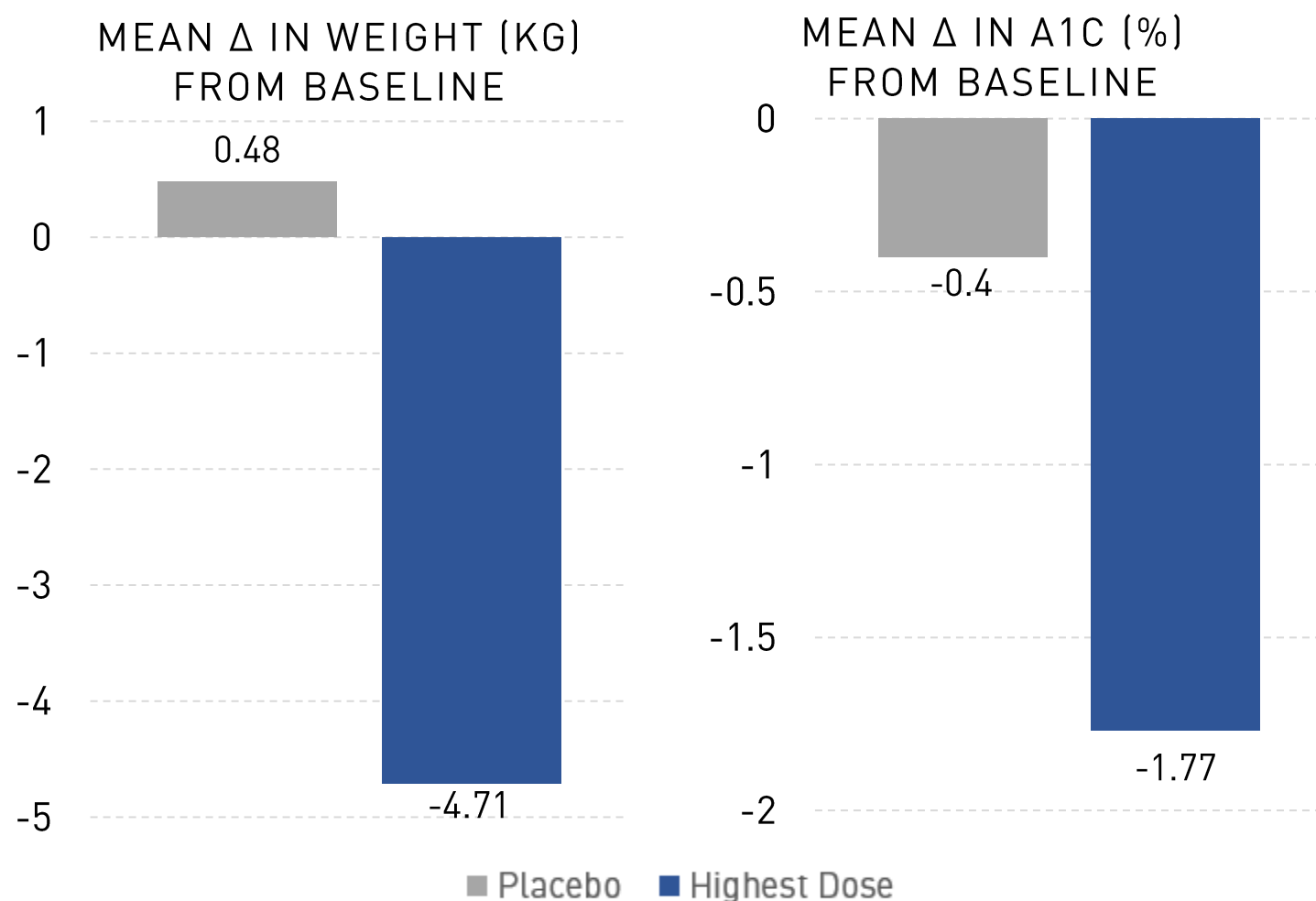
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GLP-1R NPA (LY3502970)

A CONVENIENT, EASY-TO-USE ORAL INCRETIN



12-WEEK PROOF OF CONCEPT IN T2D



SMALL MOLECULE: GLP-1R NPA

- Phase 1 data support **once daily** dosing with **no food or water restrictions**
- A 12-week proof of concept study in T2D shows potential to match high-dose subcutaneous GLP-1 receptor agonists
 - HbA1c lowering up to 1.77% points
 - Weight loss ~5kg
 - Safety and tolerability consistent with GLP-1 RA
- Phase 2 studies in T2D and obesity initiated in Q3 2021

Note: GLP-1R NPA (LY3502970) is licensed from Chugai; HbA1c = Hemoglobin A1C; T2D = Type 2 Diabetes; sc = subcutaneous

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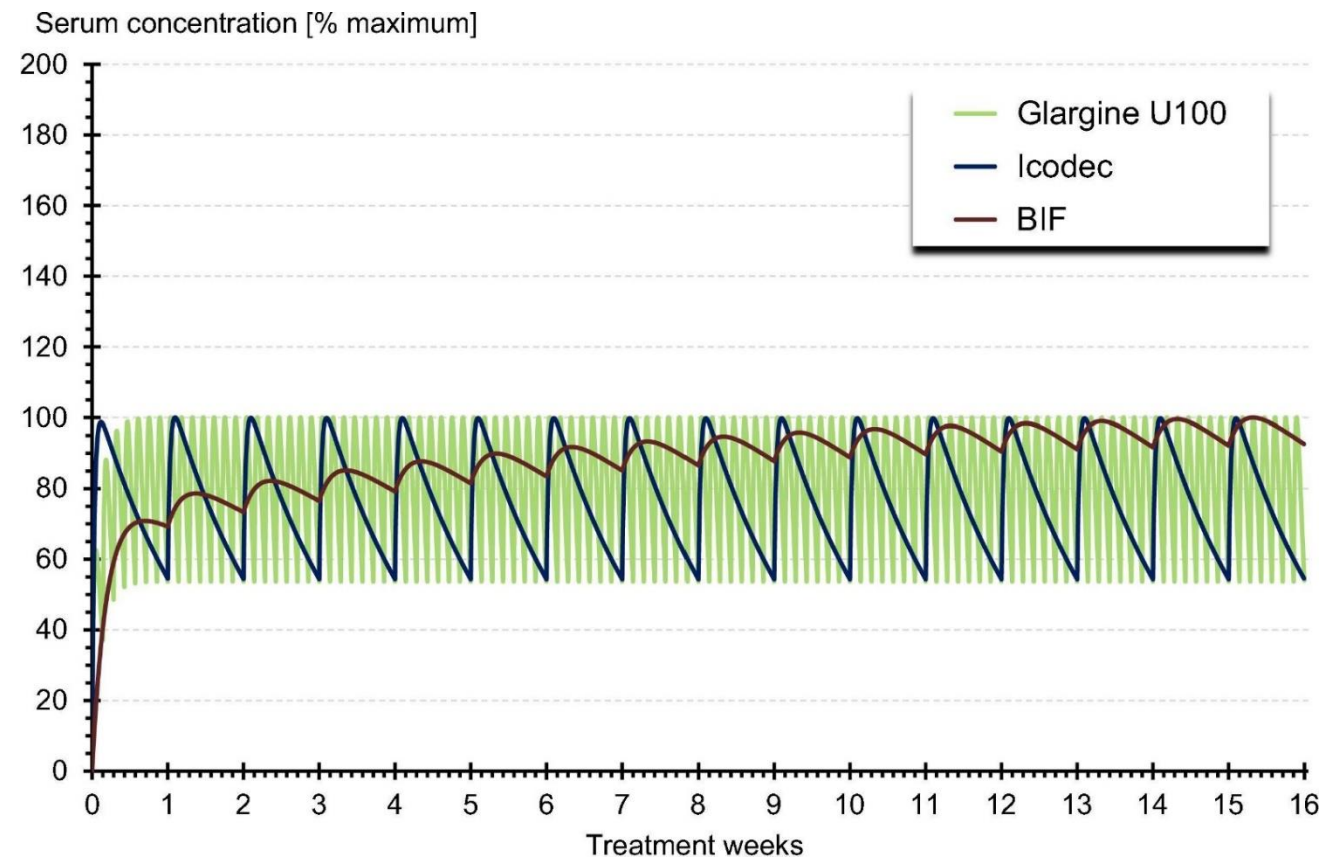
WEEKLY BASAL INSULIN Fc (BIF)

THE NEXT FRONTIER OF BASAL INSULIN THERAPY



POTENTIAL BEST-IN-CLASS WEEKLY INSULIN

Changes in serum concentrations



BIF combines a novel single-chain variant of insulin linked to a human Fc domain. Peak-to-trough ratio of ~1.1 and half-life of 17 days.

WEEKLY BASAL INSULIN OPPORTUNITY

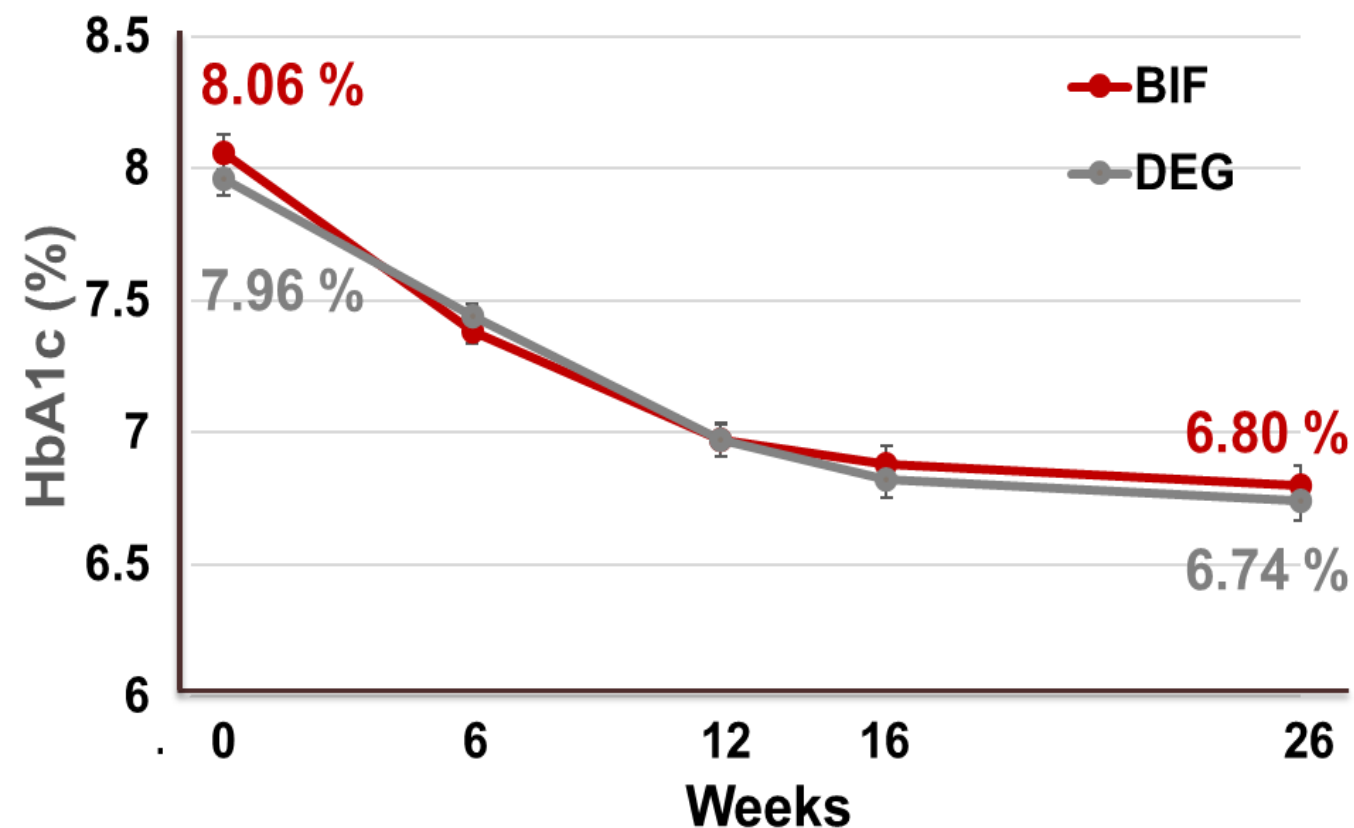
- BIF represents a significant innovation for the nearly 20,000 people with diabetes per week who are starting basal insulin for the first time¹
- Weekly dosing may result in a more patient-focused transition to insulin, leading to earlier adoption, greater adherence and improved patient outcomes
 - Clinical inertia in initiating daily insulin attributed to concerns related to hypoglycemia, weight-gain and fear of injections
 - Slow initiation or poor adherence associated with reduced glucose control and higher healthcare costs
- BIF has the lowest peak-to-trough ratio of any basal insulin to date, resulting in minimal day-to-day fluctuations in insulin and glucose
 - May result in more stable glycemic control and lower risk of hypoglycemia
- Weekly basal insulins are more complementary combination treatments with weekly GLPs than daily basal insulins

WEEKLY BASAL INSULIN Fc (BIF)

PHASE 2 RESULTS DEMONSTRATED COMPARABLE RESULTS TO INSULIN DEGLUDEC



PHASE 2 - INSULIN-NAÏVE PEOPLE WITH T2D



PHASE 2 FINDINGS

- A large Phase 2 program included people with T2D (insulin naïve & basal switch) and people with T1D; degludec (DEG) used as comparator
- In the T2D insulin naïve trial, robust glucose control was achieved (HbA1c 6.80%; shown left) with similar hypoglycemia rates compared to daily DEG
- In the T2D basal switch study, with higher glucose targets for BIF versus daily DEG, BIF achieved noninferior glycemic control (HbA1c) while showing lower rates of hypoglycemia
- While BIF is primarily being studied in people with T2D, in the T1D Phase 2 trial, similar glycemic control and similar hypoglycemia rates were observed for BIF vs. daily DEG
- No other safety signals in Phase 2 program were detected and there was no evidence of prolonged hypoglycemia

WEEKLY BASAL INSULIN Fc (BIF)

COMPREHENSIVE PHASE 3 PROGRAM EXPECTED TO START IN 2022



QWINT-1: Insulin Naïve T2D vs glargine

QWINT-2: Insulin Naïve T2D vs degludec

QWINT-3: Basal Switch T2D vs degludec

QWINT-4: MDI T2D vs glargine

QWINT-5: T1D vs degludec

- The QWINT program will consist of five global Phase 3 registration studies in all relevant diabetes populations
- The focus of the program will be people with T2D and insulin naïve
- Simple weekly dosing could result in a reduction in the barriers to insulin utilization

QWINT = QW (once weekly), IN (insulin), T (therapy); T2D = type 2 diabetes; T1D = type 1 diabetes

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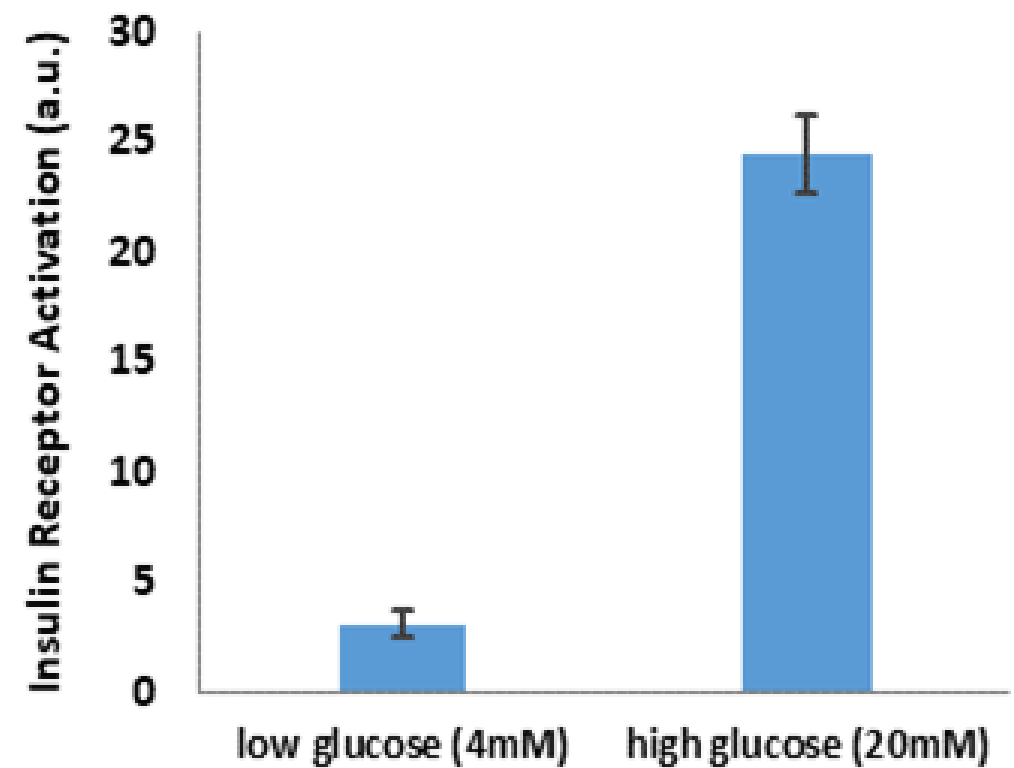
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GLUCOSE SENSING INSULIN: THE NEXT FRONTIER

UNLOCK THE EFFICACY OF INSULIN THROUGH BETTER SAFETY AND COMPLIANCE

SIGNALING (IN VITRO)

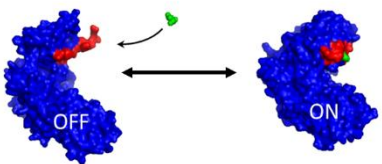
Example of Protomer GSI



Increased activity under conditions of high glucose

PROTOMER TECHNOLOGIES

- Lilly acquired Protomer because of its advanced glucose sensing technology and associated platform technology
- Multiple Protomer molecules show in vitro and in vivo profiles consistent with glucose responsiveness in the relevant physiological range
- Protomer and Lilly will advance those molecules as soon as possible into the clinic
- Vision for this platform technology is to develop a forgiving insulin to transform the way patients manage diabetes



**Glucose-sensing insulin
transforming insulin therapy**

EXISTING PORTFOLIO HAS ESTABLISHED OUR CV PRESENCE

FOCUSED R&D EFFORTS PROVIDE ADDITIONAL OPPORTUNITY TO LEVERAGE OUR EMERGING CV PRESENCE



ASCVD

Unmet Need

- Despite wide availability of LDL-C lowering therapies, there is still significant residual risk for people with diabetes & obesity
- GLP-1 RAs, such as Trulicity, have shown outcomes benefits in ASCVD

Our Focus

- We are focused on reducing residual ASCVD risk by addressing two key areas of unmet need, atherogenic remnant lipoprotein particles and Lp(a)

HEART FAILURE

Unmet Need

- Heart failure is associated with 50% mortality in 5 years and current therapies have limited impact on long-term outcomes
- Jardiance will offer a significant advancement in HFpEF & HFrEF therapy
- TZP could further improve HFpEF therapy, but the challenges of heart failure demand more options

Our Focus

- We are focused on areas that complement our emerging strength in HFpEF and will also explore select targets with breakthrough potential in HFrEF

These efforts will be critical in addressing the unmet need for people with Diabetes & Obesity

ASCVD = Atherosclerotic Cardiovascular Disease; LDL-C = low-density lipoprotein-cholesterol; CV = Cardiovascular; LP(a) = Lipoprotein (a); HFpEF = Heart Failure with preserved Ejection Fraction; HFrEF = Heart Failure with reduced Ejection Fraction; TZP = tirzepatide; GLP-1 RA = Glucagon-Like Peptide-1 Receptor Agonists

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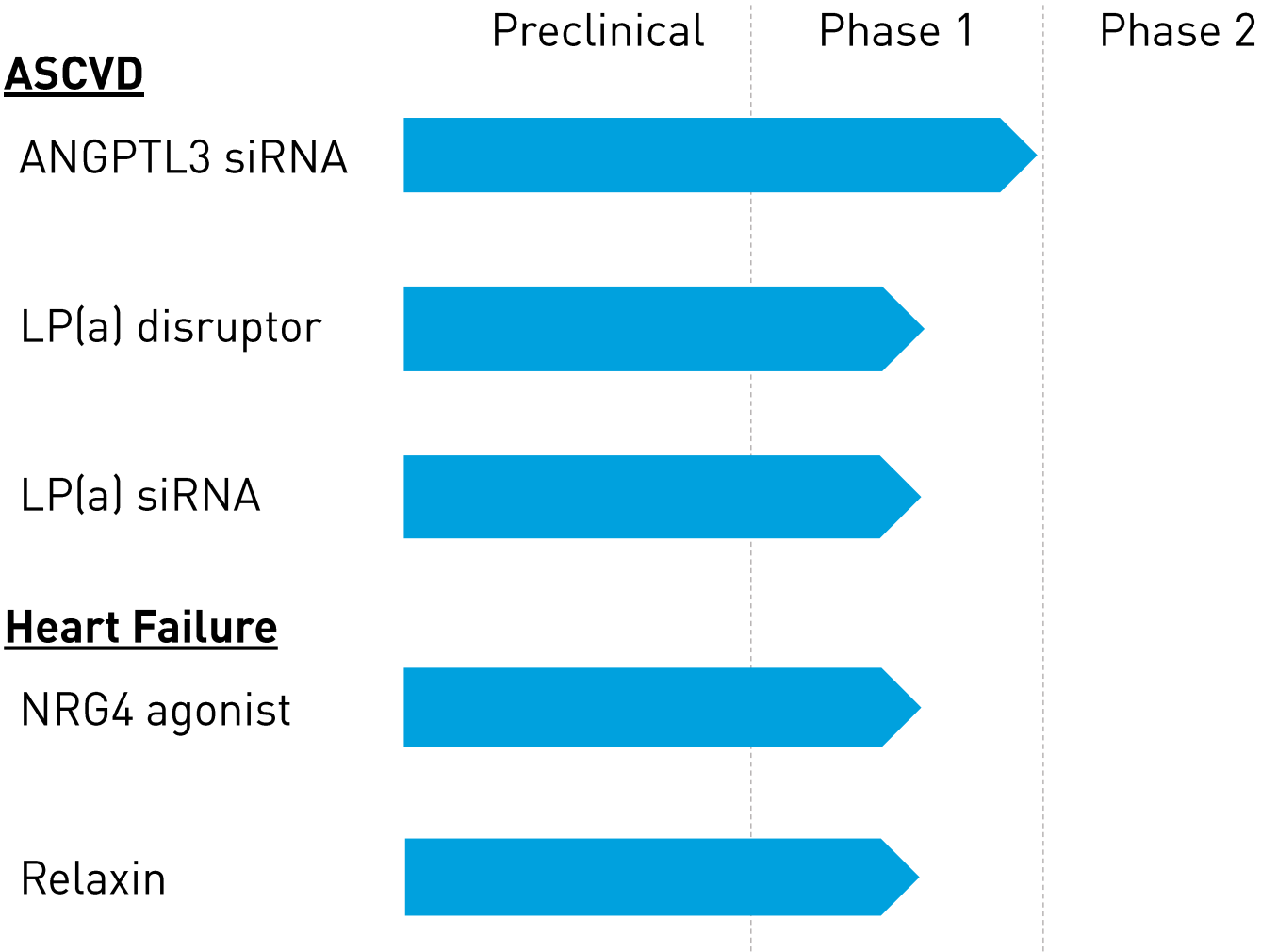
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CARDIOVASCULAR OPPORTUNITY

NEW APPROACHES AND MODALITIES TO ADDRESS KEY UNMET MEDICAL NEED



STRONG CLINICAL PIPELINE



OPPORTUNITY IN CARDIOVASCULAR

- ASCVD
 - ANGPTL3 siRNA aims to reduce CV events in subjects with high triglycerides by lowering atherogenic remnant particles
 - Oral Lp(a) disrupter program and the Lp(a) siRNA offer potential to reduce major cardiovascular events in patients with high Lp(a)
- Heart Failure
 - NRG4 agonist aims to treat subjects with chronic heart failure with reduced ejection fraction through cardiac repair and contractile function improvement
 - Relaxin, a physiological pregnancy hormone, increases cardiac output and renal blood flow. Our Relaxin program aims to bring these benefits to patients with heart failure.

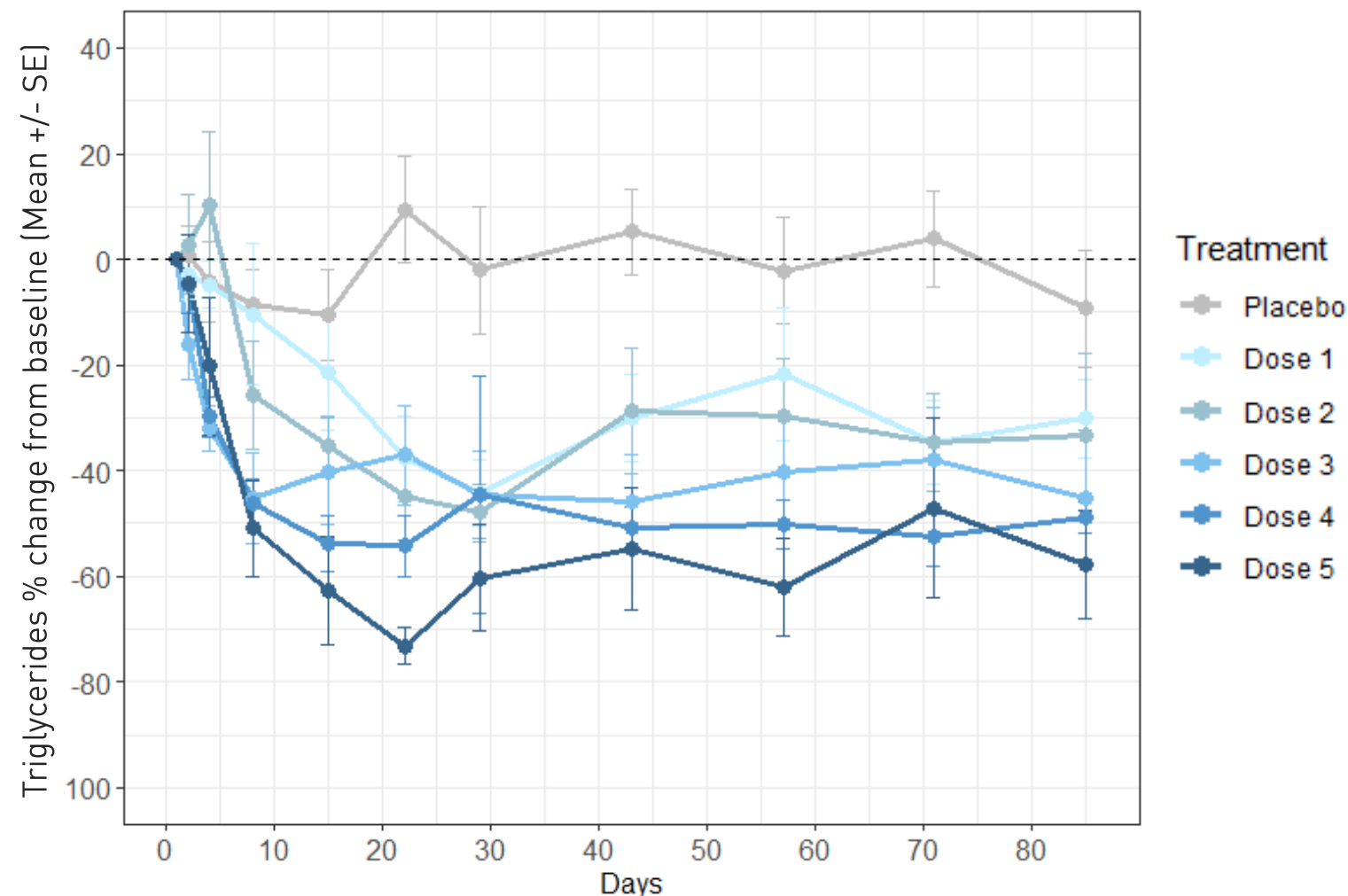
LDL = low-density lipoprotein; CV = Cardiovascular; ASCVD = Atherosclerotic Cardiovascular Disease; LP(a) = Lipoprotein (a); HFpEF = Heart Failure with preserved Ejection Fraction

ANGPTL3 siRNA (LY3561774)

ASCVD RISK REDUCTION BY LOWERING REMNANT LIPOPROTEIN PARTICLES



12-WEEK PROOF OF CONCEPT IN SUBJECTS WITH ELEVATED TRIGLYCERIDES



ANGPTL3 siRNA

- Developed in collaboration with DICERNA to silence mRNA
- The GalNAc-conjugated siRNA enables specific liver targeting
- Loss-of-function variants in ANGPTL3 reduce levels of atherogenic lipoproteins and decrease cardiovascular risk in man
- Phase 1 showed reduced atherogenic particles and significant lowering of TGs
- Plan to initiate a Phase 2 study in the first half of 2022

Note: ANGPTL3 = Angiopoietin-like Protein 3; siRNA = small interfering RNA; RNA = Ribonucleic acid; GalNAc = N-Acetylgalactosamine; TG = Triglycerides

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LILLY DIABETES & OBESITY PIPELINE

SELECT NME AND NILEX PIPELINE AS OF OCTOBER 22, 2021



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LEGEND

NME

NILEX

Commercial Collaboration

Rolling submission in the U.S. initiated

Discussed in Dec 15 Investment Community Meeting

EMPAGLIFLOZIN*
Heart Failure pEF

CONNECTED CARE
PREFILLED INSULIN PEN
Diabetes

BARICITINIB
Alopecia Areata

TIRZEPATIDE
Diabetes

SINTILIMAB (US)*
NonSquam NSCLC 1L

Note: select pre-clinical assets listed, most of which were discussed at the Lilly Investment Community meeting on December 15, 2021; NME = new molecular entity; NILEX = new indication or line extension

Not for promotional use

DIABETES & OBESITY SUMMARY



- Disrupting the devastating consequences of obesity and diabetes disease progression
 - Moving earlier in disease cascade to treat obesity to reduce metabolic diseases and complications
 - Ambitious new Phase 2 & 3 studies for tirzepatide for obesity outcomes, obstructive sleep apnea and chronic kidney disease
- Early-phase pipeline progressing towards our two incretin innovation goals:
 - Bariatric-surgery like weight loss with associated metabolic benefits
 - Expanding reach of GLP-mechanism with a convenient, easy-to-use oral incretin
- Opportunity to transform diabetes care with game-changing insulin innovation
 - BIF, our novel weekly insulin, on track to progress to Phase 3 in 2022
 - Glucose-sensing insulin as the next frontier with promising molecules obtained through Protomer acquisition
- Deep Phase 1 pipeline aimed at cardiovascular complications of diabetes and obesity has the potential to address important unmet needs in atherosclerotic cardiovascular disease and heart failure with several potential Phase 2 initiations in 2022



RUTH GIMENO, PH.D.

Vice President, Diabetes Research
and Clinical Investigation



DAN SKOVRONSKY, M.D., PH.D.

Chief Scientific and Medical Officer,
and President of Lilly Research Laboratories



JEFF EMMICK, M.D., PH.D.

Vice President, Diabetes
Product Development



MIKE MASON

President, Lilly Diabetes



2021 INVESTMENT COMMUNITY MEETING

The background of the entire image is a solid red color. Overlaid on this background is a complex, abstract network diagram. This diagram consists of numerous circular nodes of varying sizes, connected by thin, light-colored lines. The nodes are distributed across the frame, with some appearing as isolated points and others as part of larger, interconnected clusters. The overall effect is one of a dynamic, interconnected system, possibly representing a molecular structure, a data network, or a social graph. The word "APPENDIX" is centered in the middle of the image, written in a bold, white, sans-serif font.

APPENDIX

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