

10 BEST LEARNINGS FROM ADA 2025

Learning is Reliable
NEWS may not be

ADA 2025 Congress

Chicago, United States

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Dhanbad

20 - 23 June

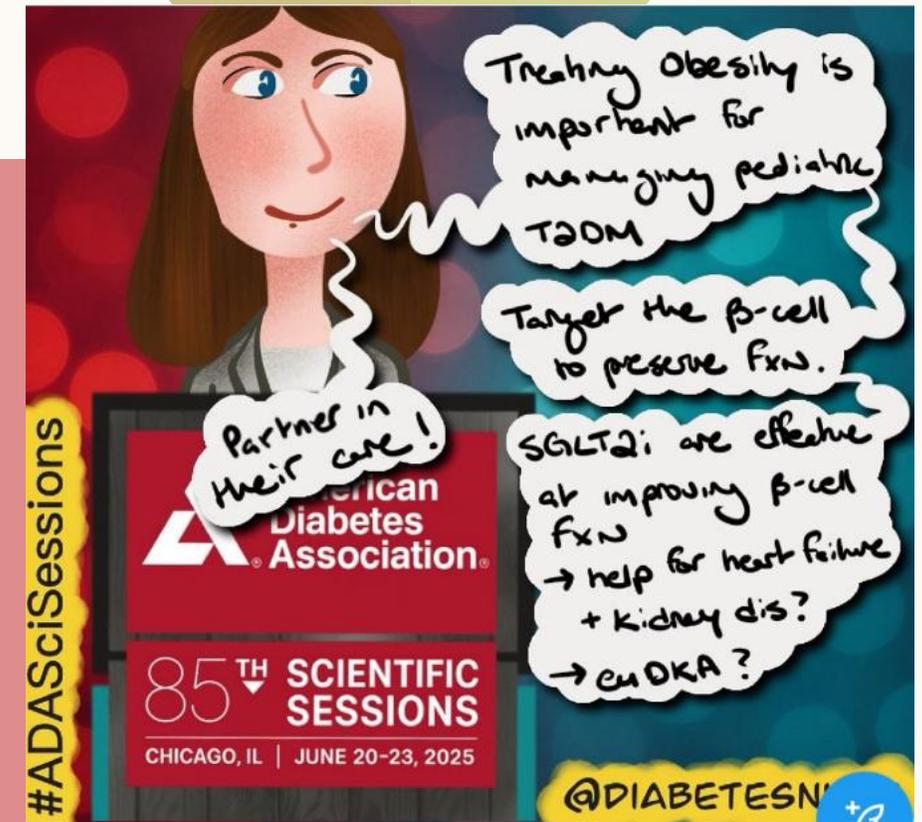
Diabetes

AGENDA

This Presentation is based on verified inputs
From those who attended /
@cmeindia1 posts

These Learnings are most important Updates

Disclaimer: I didn't attend ADA in person



The Way to the Heart is Through the Stomach

Highlights the intricate connection between diet, the digestive system, and cardiovascular health.

Opening Message



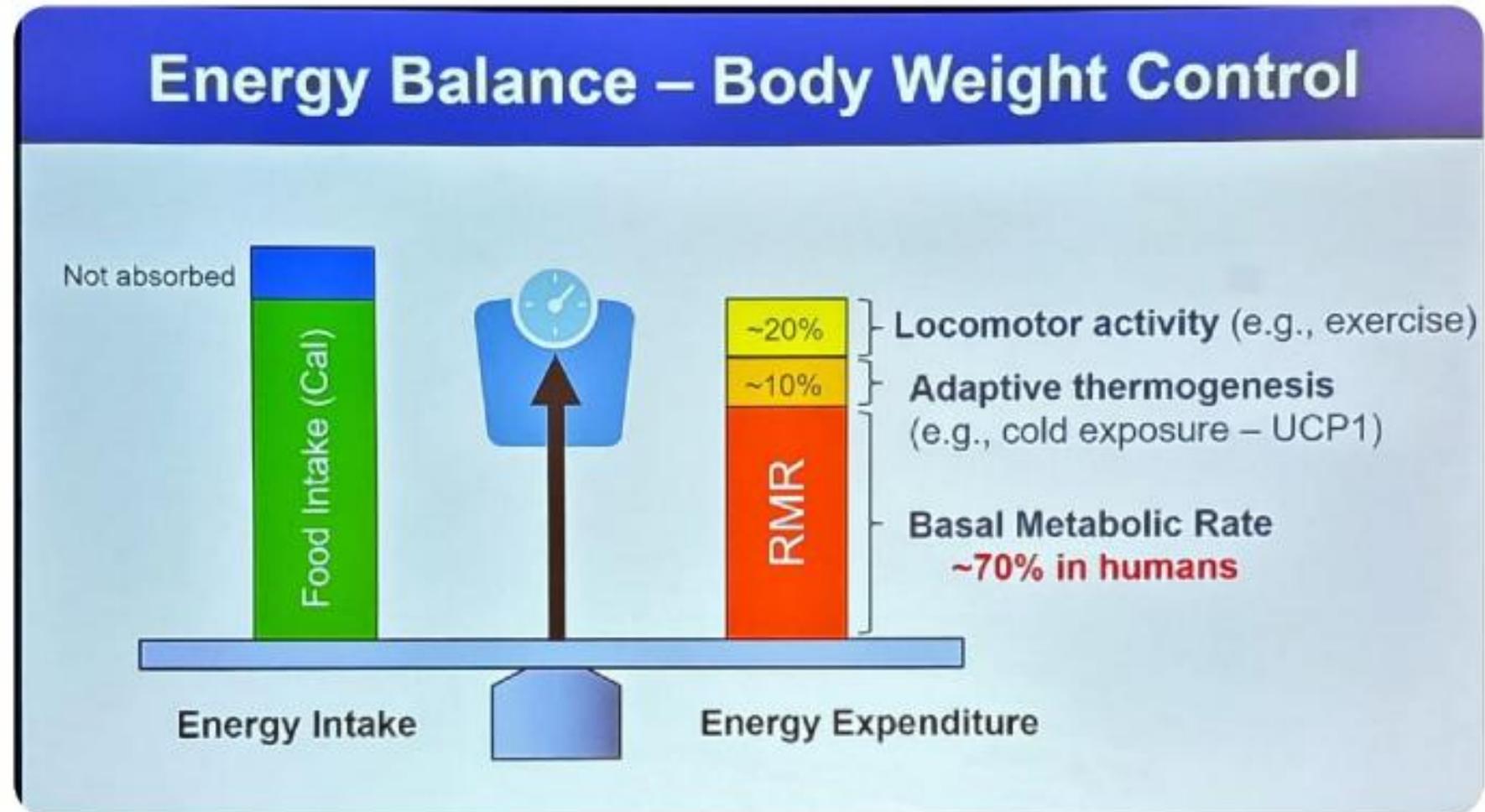
The ADA 2025 presentation titled "The Way to the Heart is Through the Stomach" seems to be part of a broader conversation about how gut health, nutrition, and metabolic processes influence cardiovascular outcomes—a theme gaining serious traction in recent years.

- ✓ **Gut Microbiome and Inflammation:**
 - ✓ **Dietary Patterns and Heart Health:**
 - ✓ **GLP-1 and SGLT-2 Therapies:**
 - ✓ **Behavioral Insights from CGM:**
- 

- **Clinical Implication:**
—“let’s take care of our muscles and mitochondria”—is a nod to the importance of preserving lean muscle mass and mitochondrial function, both of which are vital for maintaining metabolic rate and preventing insulin resistance.

🙌Gentlemen, let's take care of our muscles and our mitochondria! 💪

#ADASciSessions @SACcardiometab1



- **Energy Intake vs. Expenditure:** The green bar represents calorie intake from food, while the red bar breaks down how those calories are used. This balance is central to weight control.

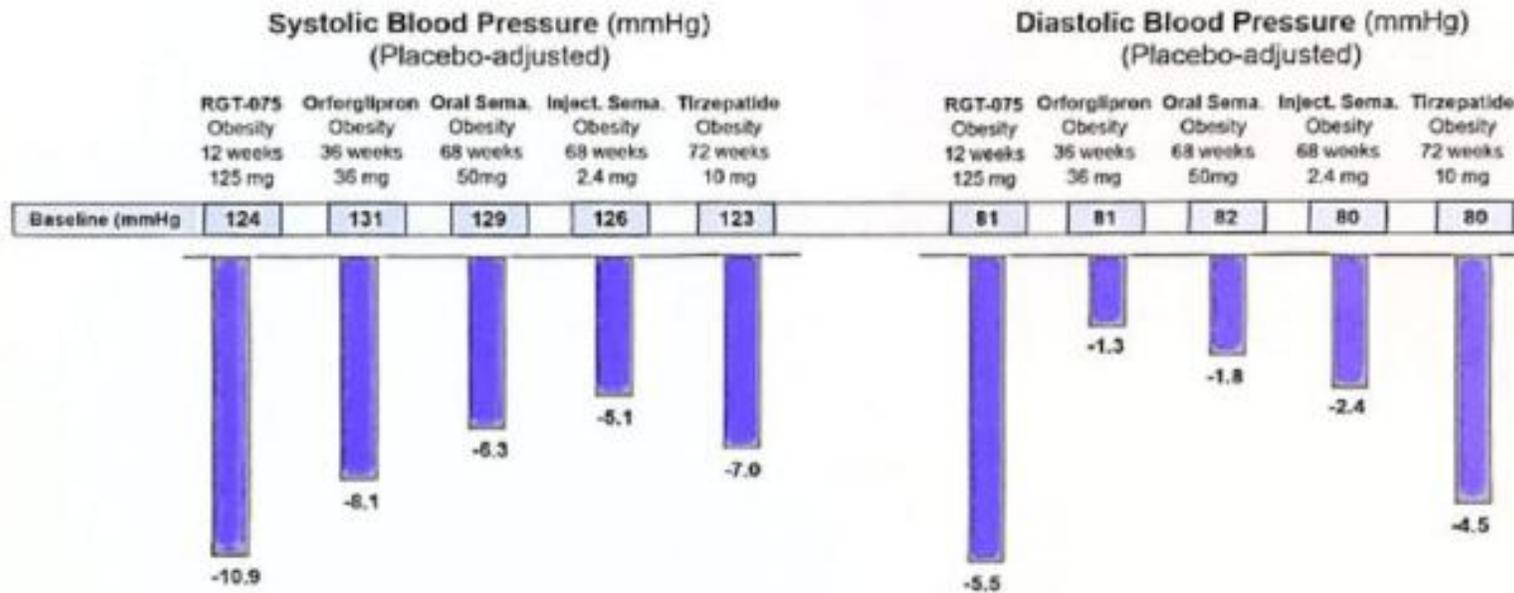
- **Resting Metabolic Rate (RMR):** The largest portion of energy expenditure (~70%) goes to basal metabolic functions—things like breathing, circulation, and cellular processes. This underscores why even at rest, our bodies are burning calories.

- **Locomotor Activity** (~20%): Physical activity contributes significantly but is still a smaller slice compared to RMR. This highlights that while exercise is crucial, it's not the only factor in weight management.

- **Adaptive Thermogenesis** (~10%): This refers to the energy used in response to environmental changes (like cold) or diet-induced thermogenesis (energy used to digest food). It's variable and influenced by factors like body composition and metabolic health.

👏👏 Impressive impact of #GLP1 agonist non-peptide small molecule on blood pressure! 👏👏 #ADA SciSessions look this results!! 👇👇 @SACcardiometab1

Meaningful Effects on Blood Pressure in Obesity.....



CX11 (VCT220) demonstrated **systolic blood pressure decrease of ~10.4 mmHg** (highest dose, Poster 743)

Rosenstock J, Poster ADA 2025, Wharton et al., *N Engl J Med*, 2023; Knop FK et al., Wilding J et al., Jaschke et al., (SURMOUNT-1) *N Engl J Med* 2022

GLP-1 small molecule (RGT₇ 075) showed notable reductions in:

- Systolic BP -8.1 mmHg at 12 weeks
- Diastolic BP: -5.0 mmHg

Other therapies like oral semaglutide, injectable semaglutide, and tirzepatide

Also showed meaningful reductions in systolic BP (-6.3 to -7.1 mmHg), though effects on diastolic BP were more modest (-1.3 to -2.8 mmHg).

- **A standout: CX11 (VCT220)**

Yielded a systolic drop of -10.4 mmHg—the most potent among them.

Why This Matters

- These reductions are placebo-adjusted reflecting true drug effects.
- For context, lowering systolic BP by even 5 mmHg is associated with significant reductions in major cardiovascular events.
- GLP-1-related agents are evolving—from weight-loss medications to comprehensive cardiometabolic therapies that improve BP, glycemic control, and weight.

Broader ADA 2025 Implication

This aligns with ADA's continued push toward personalized, multi-targeted treatment strategies, especially in people with obesity and type 2 diabetes who are at elevated cardiovascular risk.

ADA 2025 UPDATE

 CGM Targets in Diabetes: Time for Tighter Definitions?

 Are we too "lax" with Time in Range (TIR)?

 CGM-Based Glucose Ranges (Lancet Diabetes Endocrinol. 2025)

 Target Goals: Maximise TIR, Minimise TAR & TBR

 TAR – Time Above Range (>10.0 mmol/L or >180 mg/dL)

 Level 1 TAR: 10.1–13.9 mmol/L (181–250 mg/dL) → Aim < 20%

 Level 2 TAR: >13.9 mmol/L (>250 mg/dL) → Aim < 5%

 TIR – Time In Range (3.9–10.0 mmol/L or 70–180 mg/dL)

 Level 1 TIR: 3.9–7.8 mmol/L (70–140 mg/dL) → >50%

 Level 2 TIR: 7.9–10.0 mmol/L (141–180 mg/dL) → Up to 20% accepted

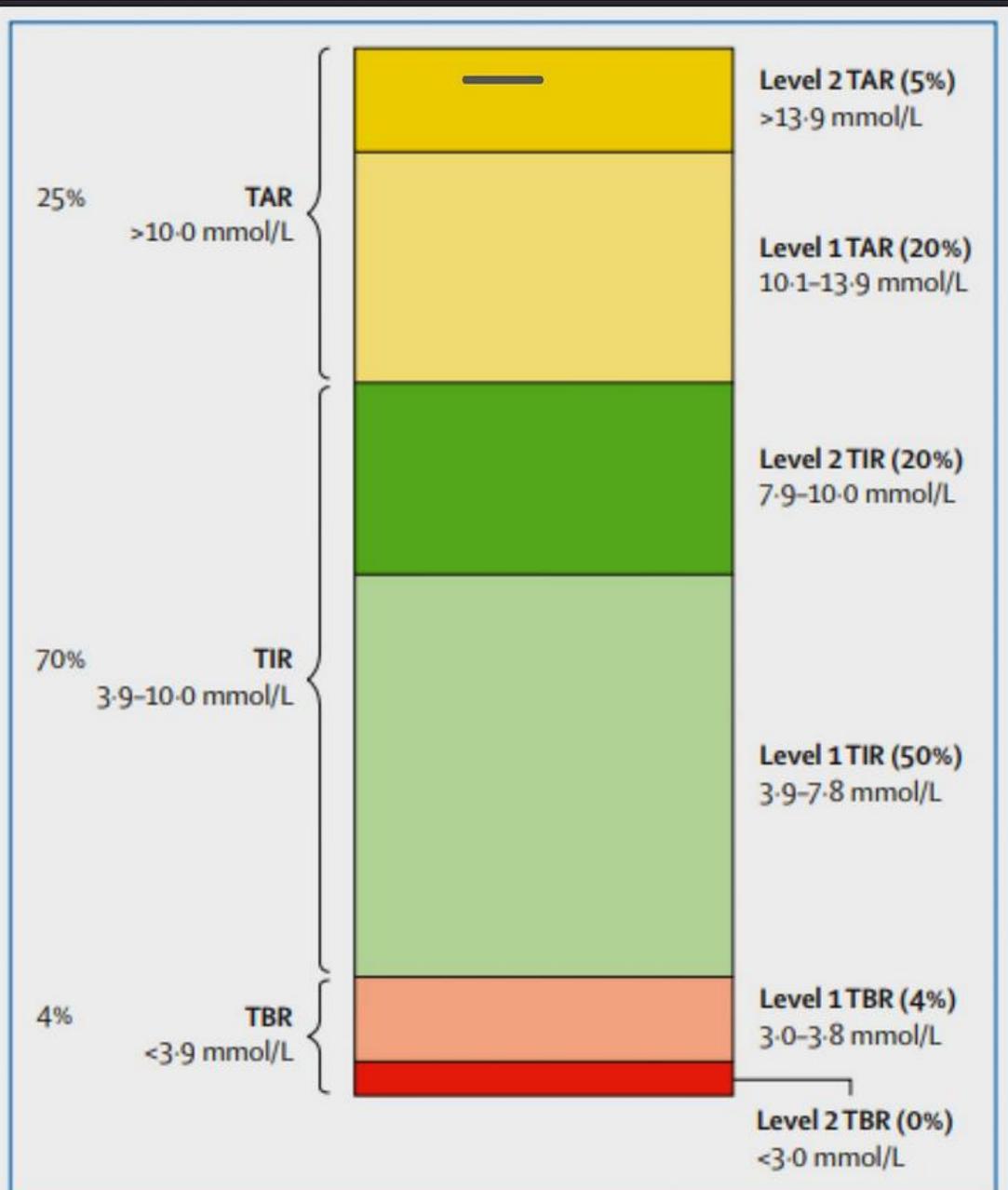


Figure: Suggested terminology and visual representation for CGM-based glucose targets.

- TBR – Time Below Range (<3.9 mmol/L or <70 mg/dL)
- Level 1 TBR: 3.0–3.8 mmol/L (54–69 mg/dL) → Target < 4%
- Level 2 TBR: <3.0 mmol/L (<54 mg/dL) → Aim = 0%

📌 **Clinical Insight:**
CGM captures dynamic glycaemic exposure

🕒 better than HbA1c 🎯

But TIR ≠ tight control always — hence:

- ✓ "Tight TIR" = 70–140 mg/dL
- 🔄 "Loose TIR" = 141–180 mg/dL

📄 **Suggested Goal:**

- ✓ TIR ≥ 70%
- ✓ TBR < 4%
- ✓ TAR < 25%

📄 Ref:
🔗 Lancet Diabetes Endocrinol. 2025

**Time
in
Tight
Range
(TITR)**

Conclusions

- HbA1c does **NOT** predict hypoglycemia or GV
 - HbA1c is **NOT** predictive at levels $< 7\%$
 - **Early detection** of dysglycaemia with CGM - **TITR**
 - **Early decisive intervention** guided by TIR & **TITR**
 - **TITR** may represent a manageable burden
 - **New world in diabetes:**
 - **Glucose in normoglycemia – TITR**
 - **Prevention of complication in T1D, T2D & GDM**
- 

It delivers a strong message about the evolving role of glycemic metrics in diabetes care—especially the shift beyond HbA1c

- HbA1c does ***not*** predict hypoglycemia or glycemic variability (GV)**—two critical aspects of daily glucose control.
- It's not predictive at levels **<7%****, meaning even patients with “good” HbA1c may still experience dangerous glucose swings.
- Early detection of dysglycaemia is now possible with ****Continuous Glucose Monitoring (CGM)****, particularly using Time in Tight Range (TITR)
- TITR may represent a manageable clinical burden, suggesting it's feasible to implement in routine care.

ADA presentation introduces a new world in diabetes” where:

- Normoglycemia is defined by TITR not just HbA1c.

- Complication prevention** in T1D, T2D, and GDM hinges on tighter, more personalized glucose targets.

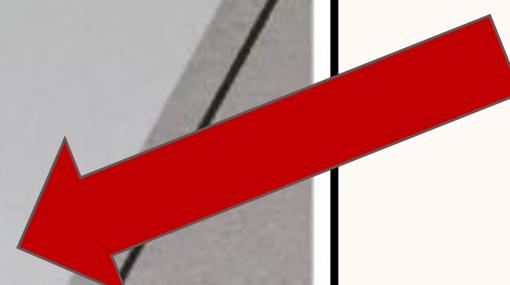
Need I say more. In the Liver symposium and the action steps are loud and clear and simplified.

[#ADASciSessions](#) @ADA_DiabetesPro

Action Steps

1. Assume all patients with pre-diabetes, type 2 diabetes, and obesity are at high risk
2. Implement FIB-4 screening in your practice, ideally embedded in EHR/EMR
3. Incorporate evidence-based management and monitoring strategies
4. Focus efforts on cardiorenal risk reduction and liver cancer prevention

Pearls in Practice



Assume High Risk: *Clinicians are urged to treat all patients with pre-diabetes, type 2 diabetes, and obesity as high-risk for liver disease even in the absence of symptoms. This reflects growing recognition of nonalcoholic fatty liver disease (NAFLD / metabolic dysfunction-associated steatotic liver disease (MASLD) as silent but serious comorbidities.*

1. **FIB-4 Screening Integration:** The slide recommends embedding FIB-4 (Fibrosis-4) scoring into electronic health records (EHR/EMR) to streamline liver fibrosis risk assessment. This non-invasive tool uses age, AST, ALT, and platelet count to estimate fibrosis risk—critical for early detection.

2. **Evidence-Based Management:** Emphasis is placed on structured, guideline-driven care, including lifestyle interventions, pharmacotherapy, and regular monitoring. This aligns with ADA's broader 2025 push for ****precision medicine**** and ****risk stratification****.

3. **Cardiorenal and Liver Cancer Focus:** The final point underscores a ****holistic approach****—not just managing glucose, but actively working to reduce ****cardiovascular, renal, and hepatic complications****, including ****hepatocellular carcinoma (HCC)****.

#ADASciSessions #ADA2025

Are Statins associated with Incident Diabetes?

UCLA Health

David Geffen
School of Medicine

- In a meta analysis of RCTs Statin therapy was **not** significantly associated with incident DM”
 - 6 RCTs (n=59,083) and 3 observational studies (n=417,523) reported on risk of new-onset DM with statin therapy.
 - A pooled analysis of the 6 RCTs showed no difference in the risk of DM (RR=1.04 [95% CI 0.92 to 1.19])
 - One trial of high intensity statin therapy, JUPITER, reported an increased risk of diabetes among statin users (3.0% vs 2.4%). In further analysis the risk was only among those with one or more DM risk factors at baseline (metabolic syndrome, BMI > 30, A1c> 6.0%)
 - Cohort studies show mixed findings

Summary of Evidence

- ❖ Meta-analysis of 6 RCTs (n=59,083) and 3 observational studies (n=417,523) found no significant association between statin use and new-onset diabetes.
- ❖ Pooled relative risk (RR): 1.04 [95% CI: 0.92–1.19]— statistically non-significant.
- ❖ JUPITER trial (high-intensity statin): Showed a slight increase in diabetes incidence (3.0% vs. 2.4%), but only in individuals with pre-existing risk factors (e.g., metabolic syndrome, BMI >30, A1c >6.0%).
- ❖ Cohort studies: Mixed findings, suggesting variability based on population characteristics and study design.

Clinical Implications

Statins remain safe and essential for cardiovascular risk reduction, especially in people with diabetes or at high risk.

Summary of GLP-1 RA and Mental Health Outcomes

| Outcome | N Studies | Result |
|------------------------------------|-----------|---------------------|
| Serious Psychiatric Adverse Events | 30 | — No difference |
| Non-Serious Psychiatric Events | 37 | — No difference |
| Depression Symptoms | 3 | — No difference |
| Quality of Life | 41 | ↑ Small improvement |

Total N Studies = 80

Pierret et al. 2025, *JAMA Psychiatry*

American
Diabetes
Association

85TH SCIENTIFIC
SESSIONS

Key Mental Health Outcomes Assessed

- **Serious Psychiatric Adverse Events (30 studies):** *No difference* observed between GLP-1 RA users and controls.
- **Non-Serious Psychiatric Events (37 studies):** Again, *no difference* detected.
- **Depression Symptoms (3 studies):** *No significant change* reported.
- **Quality of Life (41 studies):** A **small improvement** was noted—suggesting potential psychosocial benefits.

Total Evidence Base

- **80 studies** were included in this analysis, making it one of the most comprehensive assessments to date.
- Cited source: Pierret et al., 2025, JAMA Psychiatry—

Clinical Implications

- **These findings help dispel concerns about psychiatric side effects of GLP-1 RAs, which have occasionally been raised in anecdotal reports.**
- **The modest improvement in quality of life may reflect indirect benefits from weight loss, improved glycemic control, or reduced cardiovascular risk.**



**ORFORGLIPRON – Oral
Nonpeptide GLP-1 RA**

**This molecule will change the landscape of oral
drug's in T2D and Obesity.**

ACHIEVE-1: Orforglipron, a small molecule nonpeptide oral **#GLP1**, which carries no special dietary instructions, conferred reductions in HbA1c and weight at 40 weeks similar to that seen in trials of injectable GLP1s. [@EliLillyandCo](#)
[#ADA2025](#) [#ADASciSessions](#)
[@ADA_DiabetesPro](#)

Talk of the town : Orforglipron

- This molecule will change the landscape of oral drug's in T2D and Obesity.
- ACHIEVE 3 ongoing vs Oral Sema likely to be presented at EASD 2025 will be the ultimate study to watch for...

[@singh_AK](#) Singh / DM endo. Kolkata: (CME INDIA)



ORFORGLIPRON – Oral Nonpeptide GLP-1 RA

- ◆ Once-daily oral GLP-1 agonist (non-peptide)
- ◆ First-in-class, no fasting or water restrictions

ACHIEVE-1 Trial Highlights (40 Weeks)

 559 adults with early T2DM (HbA1c 7–9.5%, BMI \geq 23)
 Orforglipron 3/12/36 mg vs placebo

HbA1c Reduction

- –1.24% (3 mg)
- –1.47% (12 mg)
- –1.48% (36 mg)
- Placebo: –0.41%

Weight Loss

- –4.5% (3 mg)
- –5.8% (12 mg)
- –7.6% (36 mg)
- Placebo: –1.7%

NEJM 2025; DOI:10.1056/NEJMoa2505669):

Safety Profile

- ◆ GI AEs (mild-moderate): nausea, diarrhea
- ◆ No severe hypoglycemia
- ◆ Discontinuation: 4–8% (vs 1.4% placebo)

TAKE HOME

 **Oral GLP-1RA = injectable-like efficacy with better convenience**

 **HbA1c <6.5% achieved in majority at 36 mg**

 **Excellent weight loss (~7–8%) without plateau at 40 weeks**

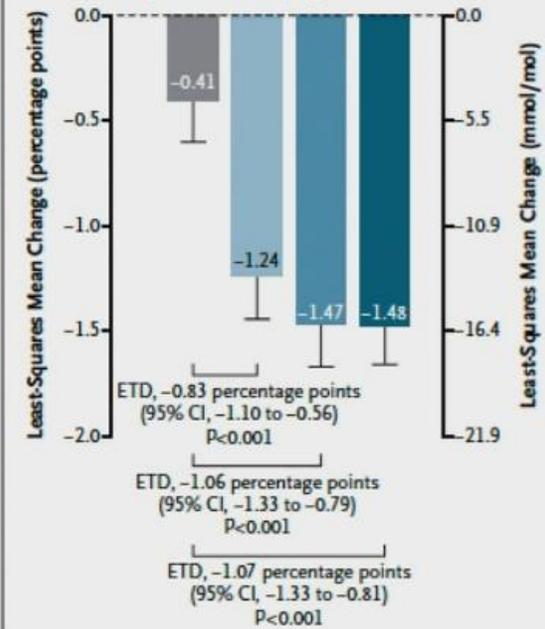
 **Ideal for early T2DM, obese, needle-averse patients**

 **GI tolerability manageable with slow titration**

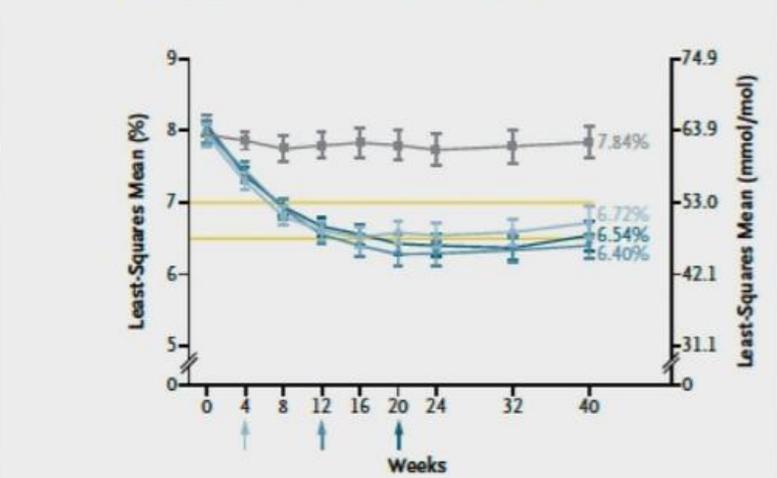
 **Potential game-changer for India: cost-effective, oral, scalable..**

■ Placebo ■ Orforglipron, 3 mg ■ Orforglipron, 12 mg ■ Orforglipron, 36 mg

A Change in Glycated Hemoglobin Level from Baseline to Week 40 (ANCOVA analysis)



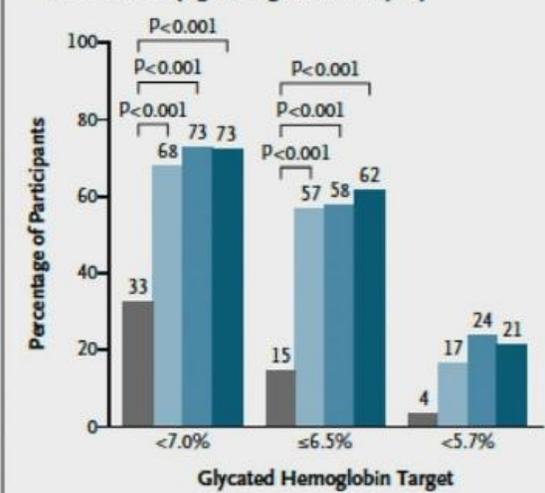
B Glycated Hemoglobin Level over Time (MMRM analysis)



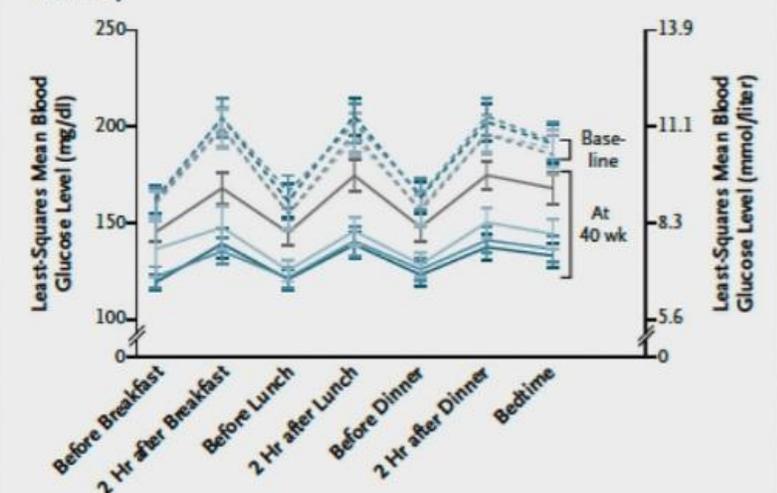
No. of Participants

| | | | | | | | | | |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Placebo | 138 | 130 | 126 | 126 | 122 | 115 | 106 | 97 | 97 |
| Orforglipron, 3 mg | 143 | 134 | 132 | 130 | 129 | 129 | 131 | 117 | 119 |
| Orforglipron, 12 mg | 137 | 128 | 128 | 126 | 124 | 115 | 119 | 118 | 112 |
| Orforglipron, 36 mg | 141 | 130 | 127 | 136 | 133 | 126 | 127 | 117 | 119 |

C Participants in Whom Glycated Hemoglobin Targets Were Reached (logistic-regression analysis)

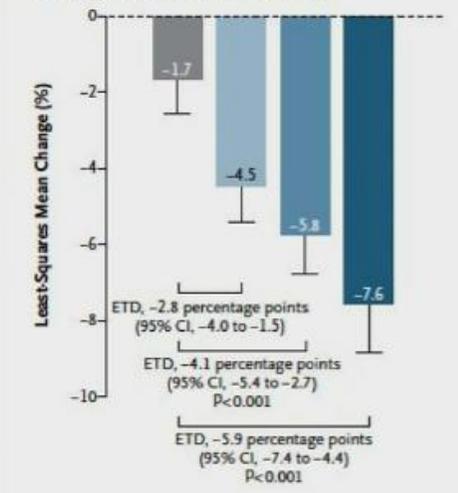


D 7-Point Blood Glucose Profiles at Baseline and Week 40 (treatment-regimen estimand)

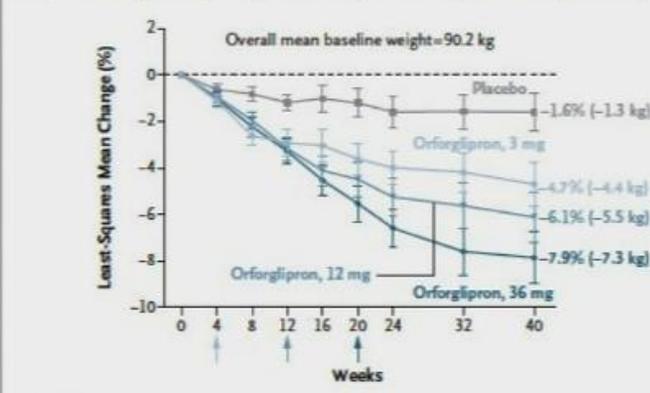


■ Placebo ■ Orforglipron, 3 mg ■ Orforglipron, 12 mg ■ Orforglipron, 36 mg

A Percent Change in Body Weight from Baseline to Week 40 (treatment-regimen estimand)



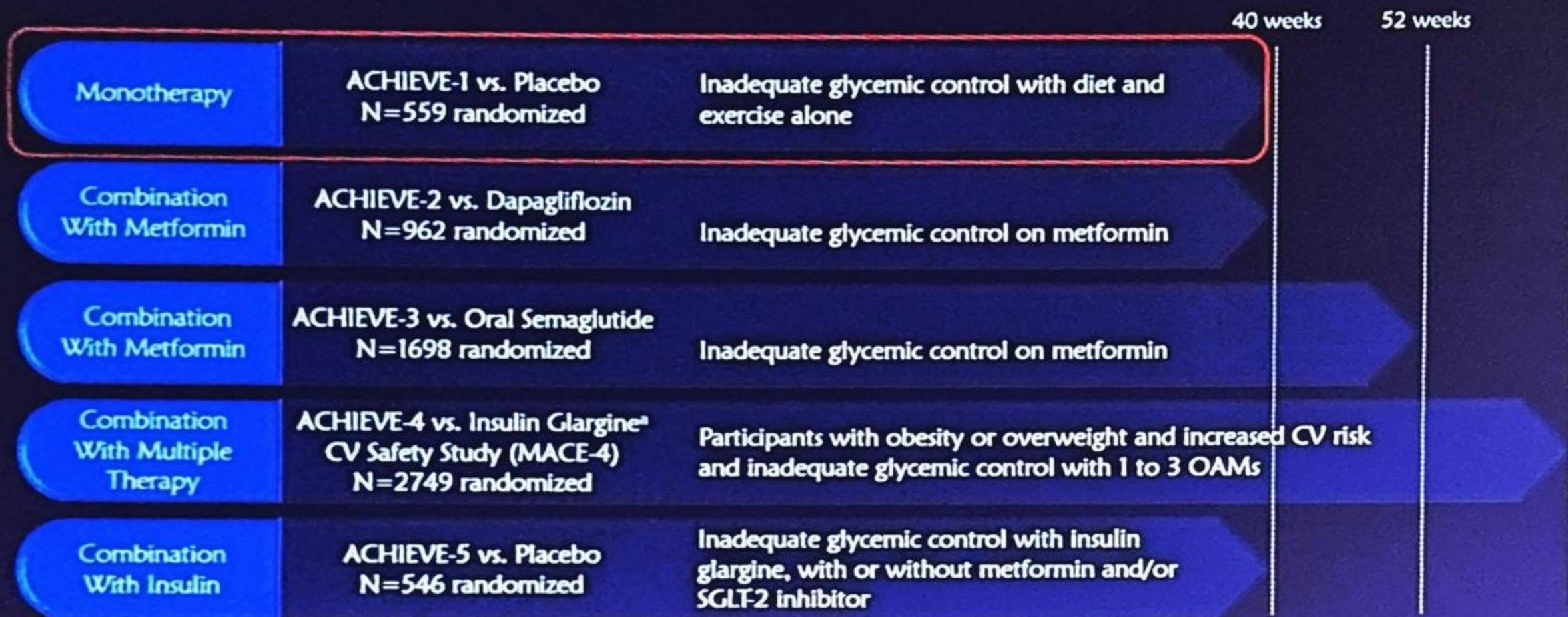
B Percent Change in Body Weight over Time (MMRM analysis — efficacy estimand)



No. of Participants

| | | | | | | | | | |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Placebo | 138 | 134 | 130 | 128 | 124 | 115 | 108 | 100 | 96 |
| Orforglipron, 3 mg | 143 | 141 | 139 | 133 | 133 | 132 | 133 | 123 | 119 |
| Orforglipron, 12 mg | 137 | 133 | 131 | 130 | 126 | 122 | 123 | 120 | 111 |
| Orforglipron, 36 mg | 141 | 138 | 137 | 135 | 134 | 130 | 128 | 121 | 119 |

ACHIEVE: OFG Clinical Development Program in T2DM



^aEvent driven trial, minimum duration 104 weeks; ^bDrugs may include metformin, SGLT-2 inhibitors, and/or sulfonylureas
CV=cardiovascular; MACE-4=CV death, non-fatal myocardial infarction, non-fatal stroke, hospitalization for unstable angina



Michael Weintraub, MD

@MWeintraubMD

Once we have a combination oral GLP1/
SGLT2 combination pill- game over. We'll
have EXCELLENT diabetes control in the vast
majority of patients.

Conversations at [#ADASciSessions](#) [#ADA2025](#)

Game-Changer in Diabetes Therapy?

"Once we have a combination oral GLP-1 + SGLT2 inhibitor pill — GAME OVER.

We'll see EXCELLENT glycemic control in the vast majority of T2D patients."

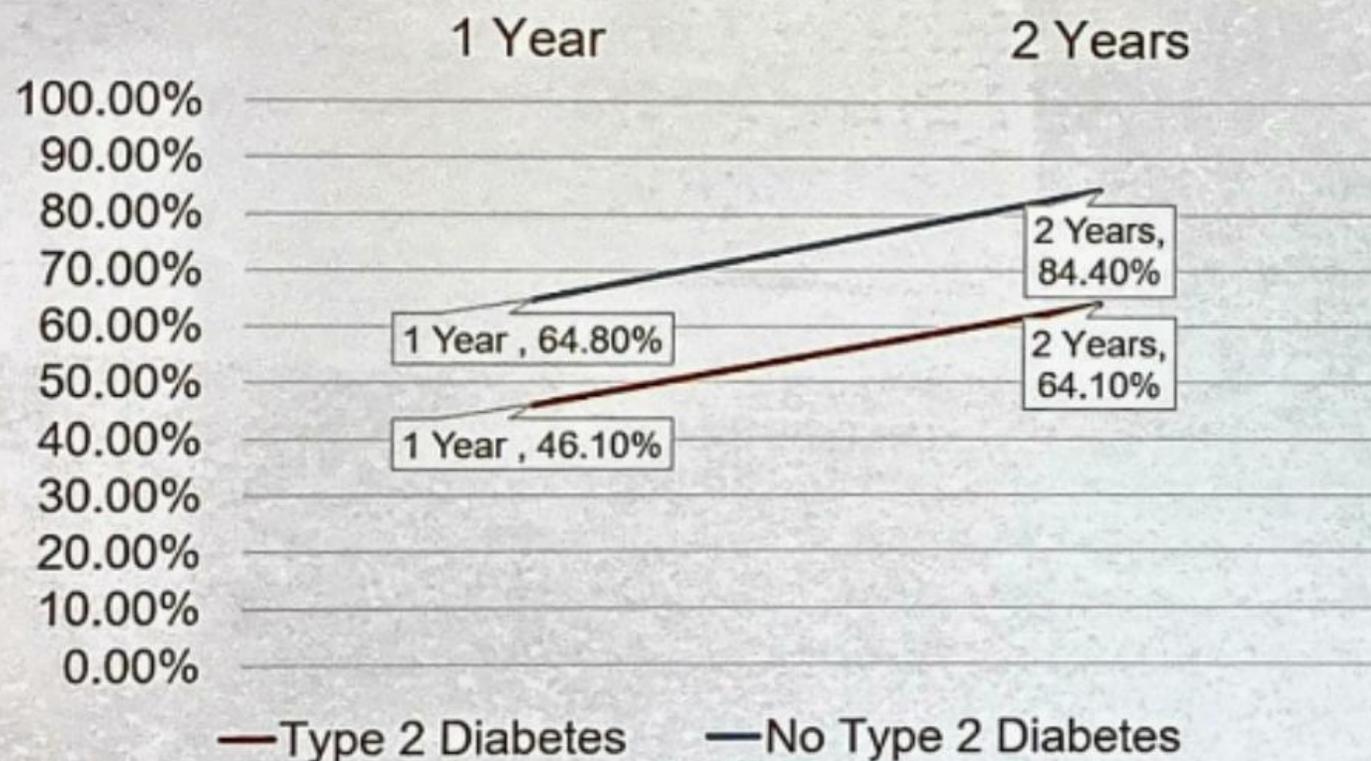
- ◆ Oral, once-daily
- ◆ Dual action: Insulin sensitization + Weight loss + Cardiorenal protection
- ◆ No needles. No cold chain. Just real-world feasibility.

 A glimpse into the future of fixed-dose diabetes management.

Are we ready for a needle-free, once-daily, multi-benefit pill for T2D?

Many people discontinue GLP-1 RAs

GLP-1 RA Discontinuation Rates 2018-2023



- 👴 Over age 65
- 💰 Lower income
- ⚖️ Lower weight-loss
- ⚠️ Adverse effects
- 💵 Cost



ADA 2025 on GLP-1 RA discontinuation:

 GLP-1 RA Discontinuation – ADA 2025 Data Insight
 Rodriguez et al., JAMA Netw Open, 2025

● GLP-1 RA discontinuation is high across patient groups between 2018–2023:

- At 1 year:
 - 64.8% without T2DM
 - 46.1% with T2DM
- At 2 years:
 - 84.4% without T2DM
 - 64.1% with T2DM

 Key Predictors of Discontinuation

 Age >65

 Low income

 Less weight loss response

 GI side effects (nausea, vomiting)

 High cost

 Implication: Despite impressive efficacy, long-term adherence to GLP-1 RAs remains a major challenge, especially in non-diabetic populations.

 **Takeaway:**

Consider patient profiling before initiating GLP-1 RAs—optimize for affordability, tolerability, and realistic expectations.

 Ref: Rodriguez et al., JAMA Netw Open. ADA 85th Scientific Sessions

HIGHLIGHTS: THE FUTURE OF DIABETES & OBESITY CARE IS HERE

ONCE-MONTHLY MARITIDE
(AMGEN)

ORFORGLIPRON (ACHIEVE-1
TRIAL, ELI LILLY)

BELIEVE STUDY: BIMAGRUMAB
+ SEMAGLUTIDE COMBO

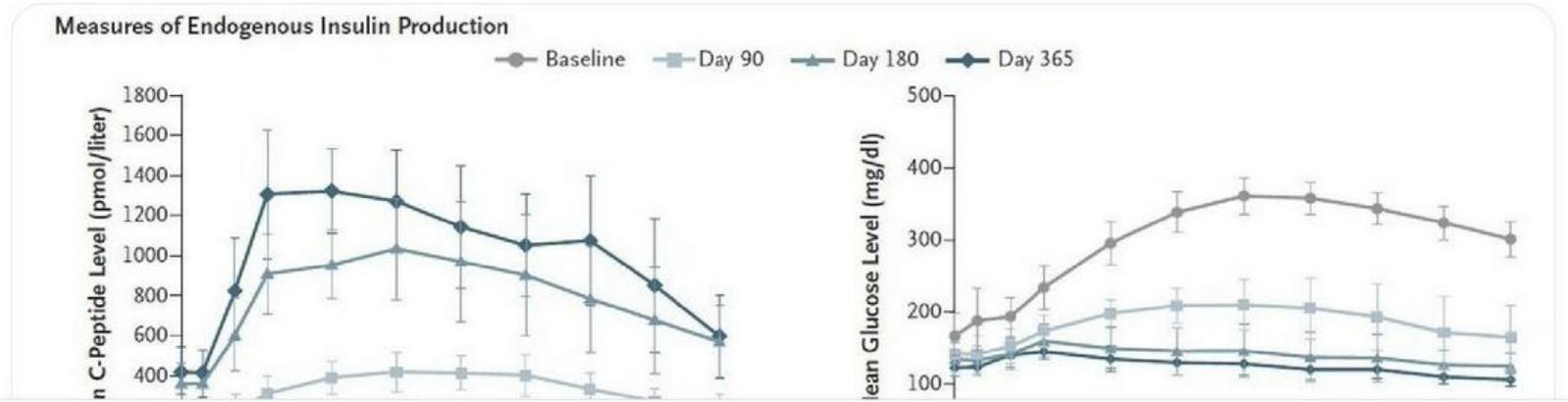
CAGRISEMA (REDEFINE 1 & 2
TRIALS)

 “This year’s ADA is a data-driven leap forward—from convenience dosing and oral GLP-1s to precision medicine and AI-enabled care. It’s not just about weight loss. It’s about doing it better, smarter, and more humanely.”

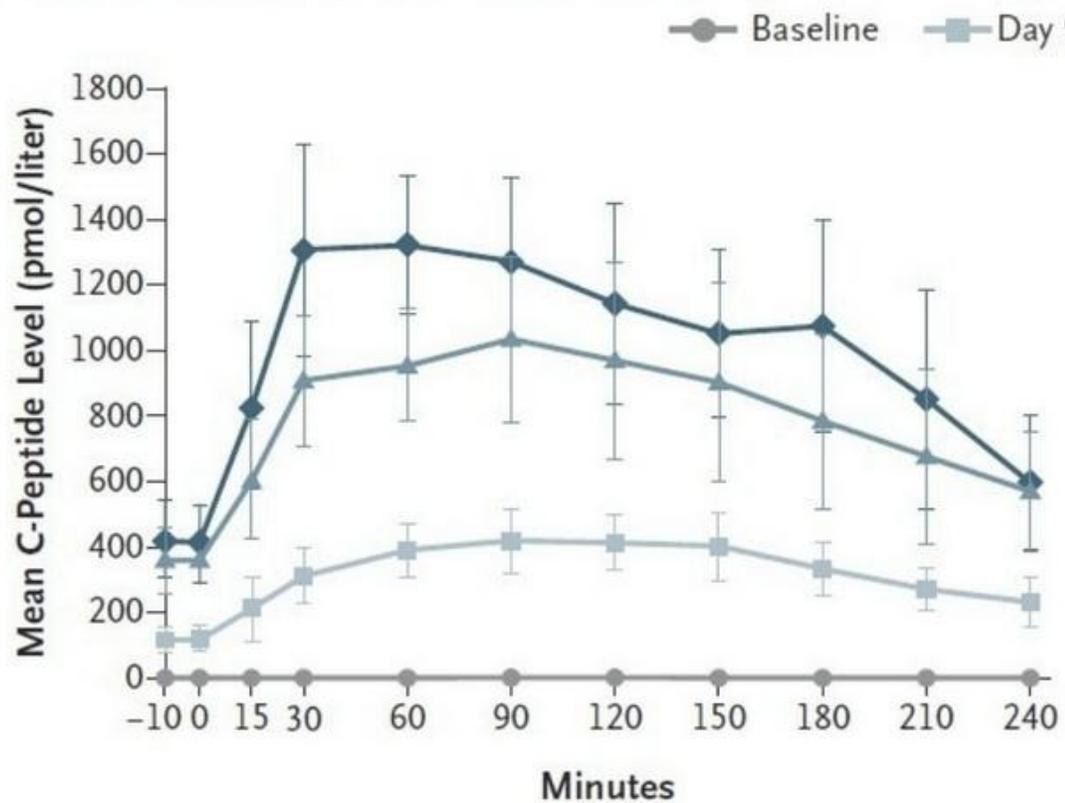
Presented at #ADASciSessions:

Zimislecel is an allogeneic stem cell-derived islet-cell therapy. This phase 1-2 study supports the hypothesis that zimislecel can restore physiologic islet function and thus treat persons with type 1 diabetes. Full study: [nejm.org/3ZGupbv](https://nejm.org/doi/10.1056/NEJMoa2102107)

Talk of the World now

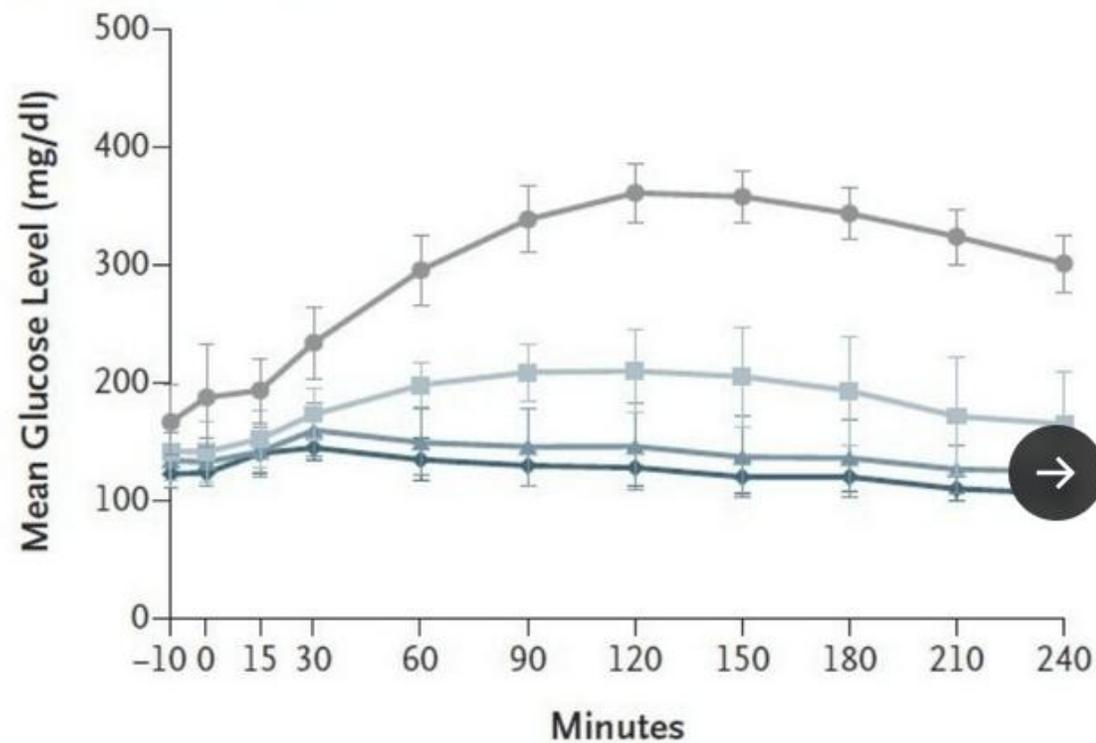


Measures of Endogenous Insulin Production



No. of Participants

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| Day 365 | 12 | 12 | 11 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Day 180 | 12 | 11 | 10 | 11 | 11 | 12 | 11 | 11 | 11 | 11 | 11 |
| Day 90 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 11 |
| Baseline | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 11 | 12 | 12 | 12 |



No. of Participants

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| Day 365 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Day 180 | 11 | 11 | 11 | 11 | 11 | 12 | 11 | 11 | 10 | 11 | 11 |
| Day 90 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 11 | 12 |
| Baseline | 11 | 11 | 12 | 11 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |

Phase 1–2 study on Zimislecel – an allogeneic, stem cell–derived islet-cell therapy for Type 1 Diabetes (T1D):

Zimislecel – A Stem Cell–Derived Islet Therapy for T1D

- ◆ Allogeneic, off-the-shelf islet-cell product
- ◆ Infused into portal vein
- ◆ Glucocorticoid-free immunosuppression used

 Study Design (NEJM 2025; DOI:10.1056/NEJMoa2506549)

 14 patients with long-standing T1D (C-peptide–negative at baseline)

 Parts A, B, C ($0.4\text{--}0.8 \times 10^9$ cells infused once; full dose in B & C)

 Primary endpoint (Part C):

- ✓ Freedom from severe hypoglycemia
- ✓ HbA1c $<7\%$ or $\geq 1\%$ reduction at 180–365 days

 Secondary: Insulin independence, safety, C-peptide response

Efficacy Highlights

 Engraftment achieved in all 14 (C-peptide detectable post-infusion)

 HbA1c $<7\%$ in all 12 full-dose patients

 No severe hypoglycemia (Days 90–365)

 $>70\%$ time in target range (70–180 mg/dL)

 83% (10/12) insulin-independent at 1 year

Safety

- ◆ Neutropenia – most common serious AE (21%)
- ◆ 2 deaths:
 - Cryptococcal meningitis (immunosuppression-related)
 - Progressive dementia (preexisting condition)

Clinical Pearls

-  Zimislecel = first off-the-shelf allogeneic islet transplant approach
-  C-peptide reappearance in all = proof of β -cell restoration
-  83% insulin independence = unprecedented efficacy for T1D
-  Major advance in cell therapy vs current transplant limitations
-  Safety profile needs optimization – immunosuppression risks real
-  Still investigational – but paves the way for durable, needle-free T1D care

Bottom Line

Zimislecel shows robust glycemic control, insulin independence, and islet function restoration in T1D—marking a historic milestone in regenerative diabetes therapy. Larger trials underway.

Tirzepatide Hits Weight Loss Thresholds Faster Than Semaglutide

 **Post hoc SURMOUNT-5 shows earlier + longer BW reduction**

 **72-week RCT (n=750; tirzepatide vs semaglutide, MTD)**

 **Median time to thresholds (TZP vs SEMA):**

- **≥5%: 8 vs 12 wks**
- **≥10%: 16 vs 20 wks**
- **≥15%: 24 vs 36 wks**
- **≥30%: 48 vs 52 wks**

 **BW reduction sustained longer with TZP at all thresholds**

 **Faster onset + longer durability may support clinical decision-making**

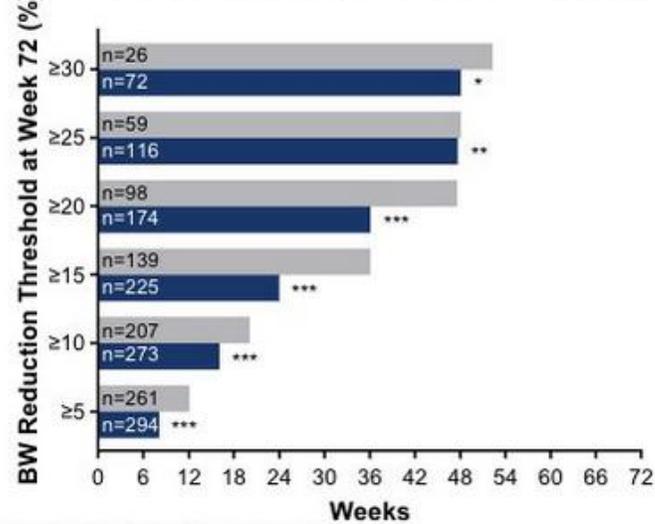
 **Poster 2202-LB**

KEY RESULTS

Tirzepatide Group Reached BW Reduction Threshold Sooner Compared With Semaglutide Group

■ Sema MTD (1.7 or 2.4 mg) ■ TZP MTD (10 or 15 mg)

Time to First Reach BW Reduction Threshold

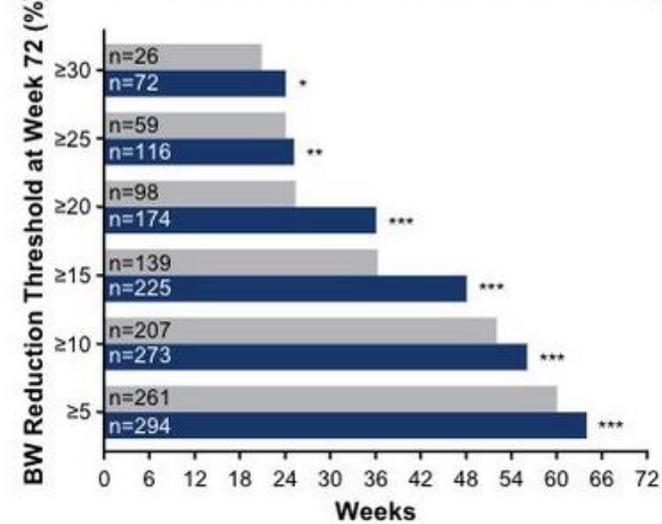


*p<0.05, **p<0.01, ***p<0.001 vs. semaglutide.

Notes: n values are the number of participants who reached each threshold. Data are median values. p-values are based on Wilcoxon rank sum test to compare median between treatments. Sustained weight loss is achieved if meeting weight loss target at a post-baseline visit and at all subsequent visits, with 3% fluctuation allowed at subsequent visits (eg, >7% for 10% weight loss target once ≥10% is met). Time to meet target and duration of sustained weight loss are calculated in participants who achieved sustained weight loss.

BW Reduction Was Sustained Longer With Tirzepatide vs. Semaglutide

Duration of Sustained BW Reduction



■ Of note, for the higher BW threshold categories (eg, ≥25% and ≥30%) there was less time remaining in the trial vs. lower BW threshold categories to demonstrate the duration of sustained weight loss

Proportion of Participants Who Achieved and Sustained BW Reduction Threshold

| BW Reduction Threshold at Week 72, % | Semaglutide MTD (n=305) ^a | Tirzepatide MTD (n=296) ^a |
|--------------------------------------|--------------------------------------|--------------------------------------|
| ≥30 | 26 (8.8) | 72 (23.6) |
| ≥25 | 59 (19.9) | 116 (38.0) |
| ≥20 | 98 (33.1) | 174 (57.0) |
| ≥15 | 139 (47.0) | 225 (73.8) |
| ≥10 | 207 (69.9) | 273 (89.5) |
| ≥5 | 261 (88.2) | 294 (96.4) |

^aNumber of participants with Week 72 weight available. Notes: Data are n (%). Sustained weight loss is achieved if meeting weight loss target at a post-baseline visit and at all subsequent visits, with 3% fluctuation allowed at subsequent visits (eg, >7% for 10% weight loss target once ≥10% is met).

Early-Onset Type 2 Diabetes: A Distinct Clinical Entity Needing Urgent Attention³⁵

 [https://doi.org/10.1016/S0140-6736\(25\)01012-8](https://doi.org/10.1016/S0140-6736(25)01012-8)

Key Insights:

• Global Rise in Early-Onset Type 2 Diabetes

- The incidence and prevalence of type 2 diabetes in people under 40 years is sharply increasing worldwide, particularly in low- and middle-income countries. Rising obesity among youth is a key contributor.
- Diagnostic Confusion is Common
- In early adulthood, there is significant overlap between type 1 diabetes, early-onset type 2 diabetes, and monogenic diabetes, leading to frequent misclassification.
- Early-onset type 2 typically presents in those under 40, often overweight or obese (except in Asians), with preserved C-peptide, negative pancreatic antibodies, and a strong family history.
- Type 1 diabetes may present at any age, often with positive antibodies and low C-peptide.
- Monogenic diabetes usually presents before 30, any BMI, negative antibodies, and preserved C-peptide, with a single-parent family history.

- **Evidence Gaps in Early Adulthood**

- There is a notable lack of cardiovascular outcome trials, prospective cohort studies, and interventional studies (pharmacologic or lifestyle) in people with type 2 diabetes aged 19–39 years. Clinical guidelines and access to specialist care are also insufficient in this group.

- **Ethnicity and High-Risk Populations**

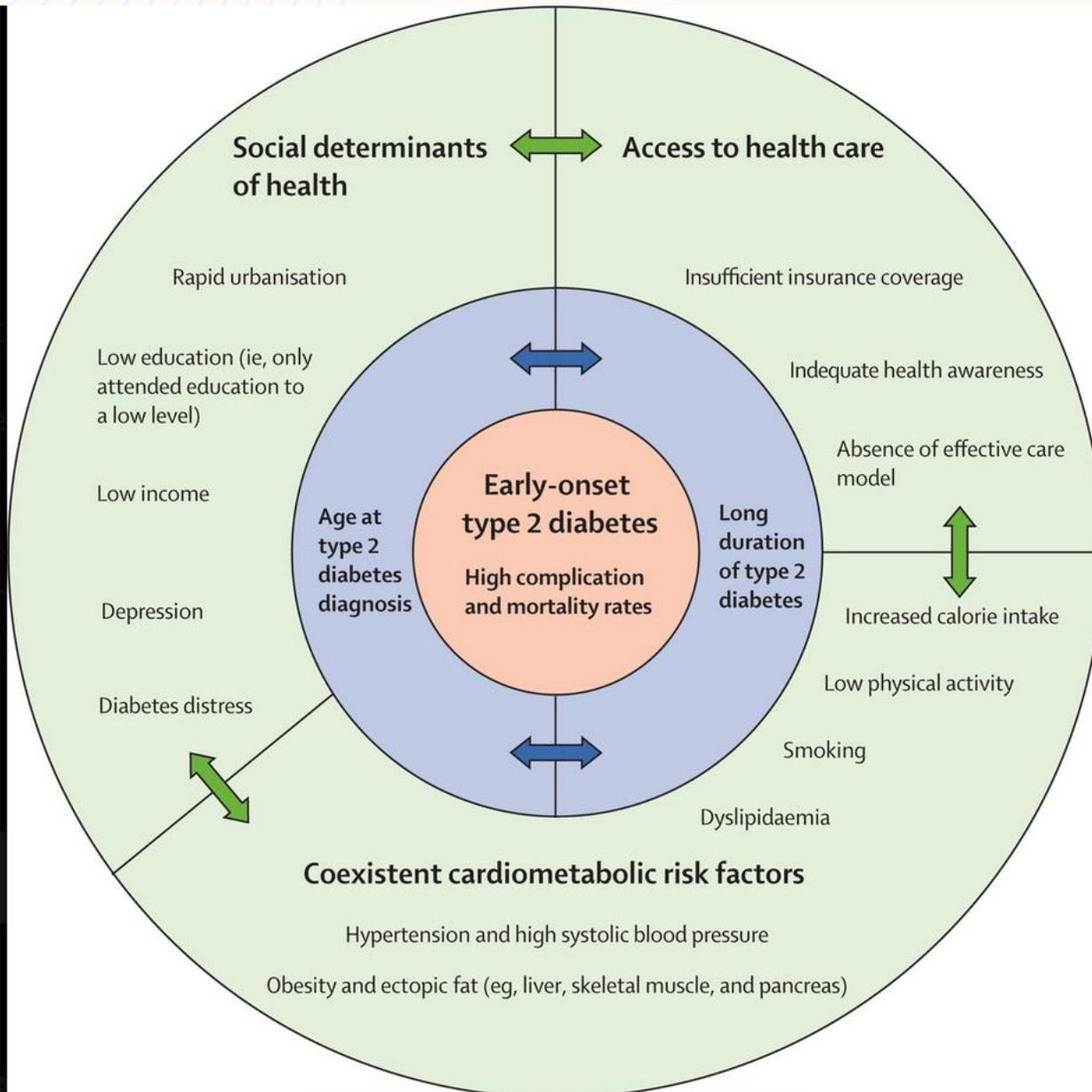
- Ethnicity influences risk via multiple biological and socio-environmental pathways. South Asians, for example, often develop diabetes at lower BMIs. Early detection strategies should account for this.

- **Obesity as a Central Driver – but Not the Whole Story**

- While rising obesity in young people appears to be the major factor in the early onset of T2D, other contributors—like genetic susceptibility, inflammation, and socio-economic exposures—also play critical roles.

- **Call for Targeted Prevention and Research**

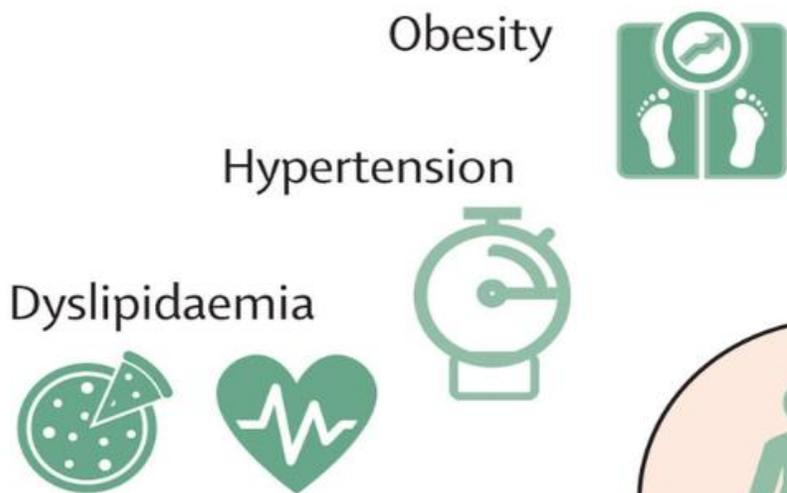
- High-risk youth and early adults represent an urgent prevention opportunity. The authors urge investment in age-specific diagnostic tools, early interventions, and global research collaborations to close the many evidence gaps.



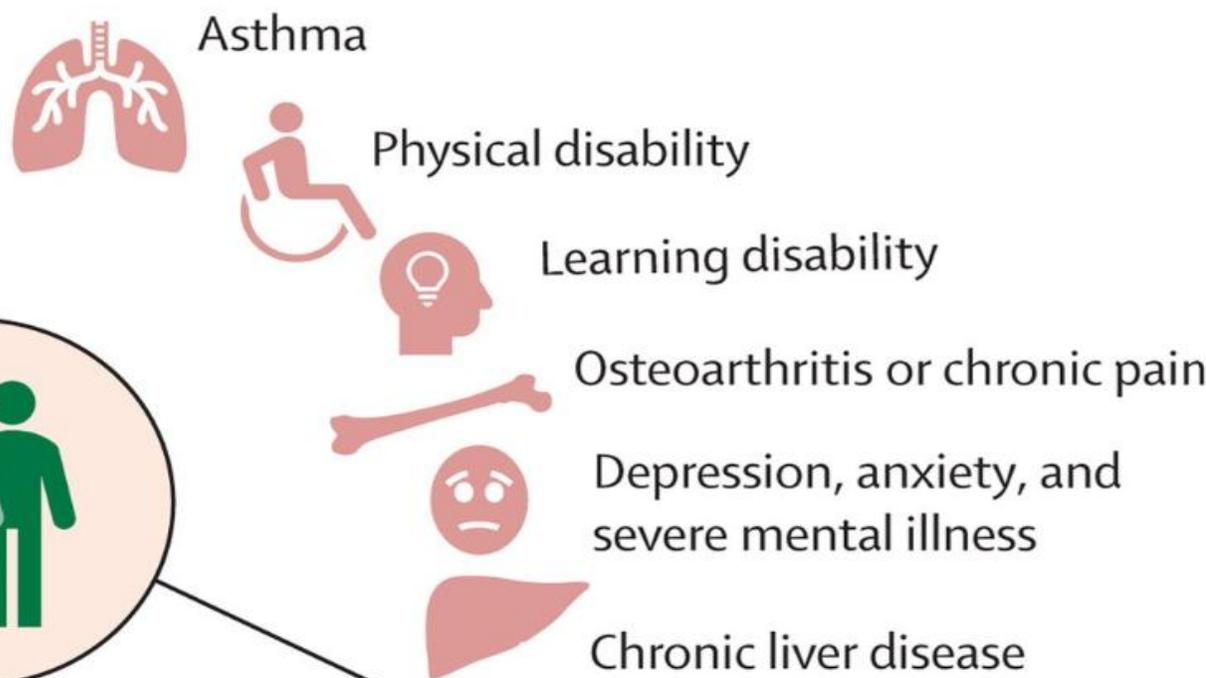
Early-onset type 2 diabetes is not just adult diabetes at a younger age — it is a distinct pathophysiological and public health challenge.

Misclassification, missed care, and insufficient research make this a critical frontier in global diabetes care.

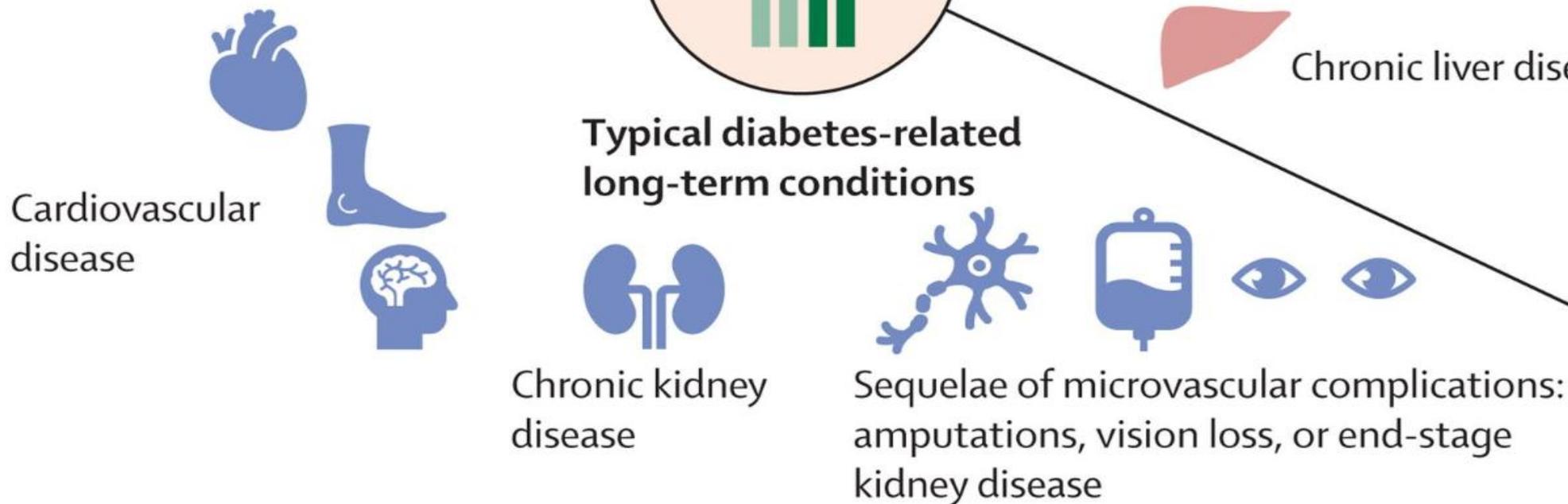
Additional metabolic long-term conditions



Other associated long-term conditions



Typical diabetes-related long-term conditions



Summary (1)



Incidence and prevalence of early-onset type 2 diabetes is increasing across most global regions



Challenges around case ascertainment / estimates



An increase in obesity in young people has led to this transition towards earlier-onset of type 2 diabetes: ?inevitable



Risks of excess adiposity in driving early-onset are mediated by other factors

Summary (2)



Ethnicity exerts its effect on increased risk through multiple channels



High risk groups offer potential for prevention



Considerable research gaps need to be addressed – plenty to do!

Update from #ADA2025 : Bimagrumab: One of the Hottest News

Bimagrumab Targets Activin Pathway in Obesity – Dual Action Molecule

◆ What is Bimagrumab?

A monoclonal antibody that blocks activin type II receptors (ActRIIA/B)

Dual Mechanism:

In Adipose Tissue

- Blocks Activin E & GDF3   Lipid mobilization,  Fat storage
-  Goal: Decrease fat mass

In Muscle Tissue

- Blocks Activin A & Myostatin   Muscle growth
-  Goal: Increase lean mass

Key Clinical Trials

- ◆ BELIEVE Phase 2B
- IV Bimagrumab ± Semaglutide, quarterly dosing
- ◆ • SC Bimagrumab ± Tirzepatide, weekly dosing

 Why it matters?

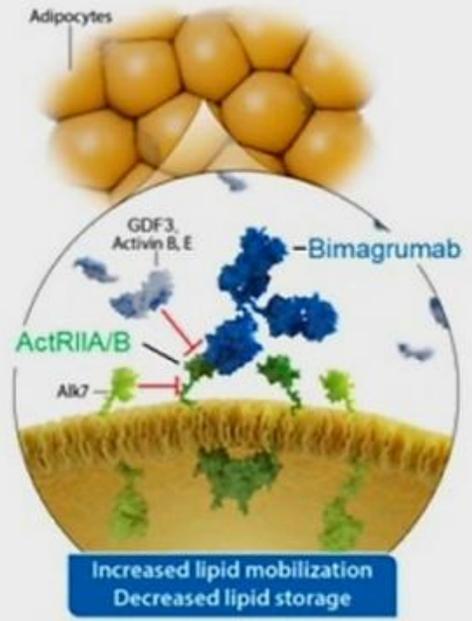
 A novel “fat-loss + muscle-preserving” strategy in obesity

 May redefine metabolic obesity treatment goals beyond GLP-1s

 Watch this space:
Combining GLP-1s + ActRII blockers could be the future of metabolic therapy

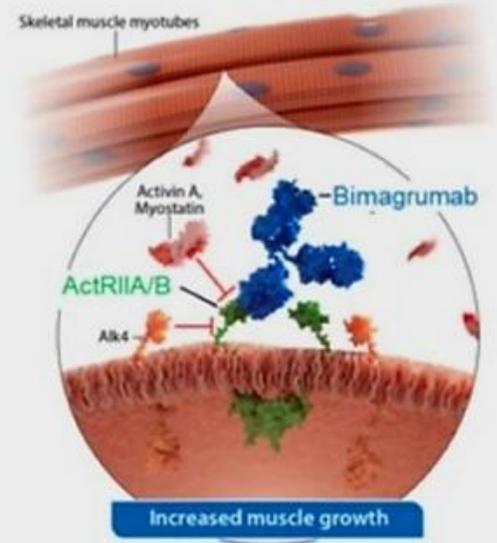
Bimagrumab: Targeting the Activin Pathway for Obesity

Adipose



Blocks activin E and GDF3 signaling with the goal of decreasing fat mass

Muscle



Blocks activin A and myostatin signaling with the goal of increasing muscle mass

Bimagrumab

- Monoclonal antibody that blocks activin type II receptors
- BELIEVE Phase 2B study evaluated IV bimagrumab dosed quarterly ± semaglutide
- Additional Phase 2 trials evaluating SC bimagrumab dosed weekly ± tirzepatide

Overall Conclusions

- In this phase 2 BELIEVE study in adults with obesity, treatment with the novel combination of an activin pathway inhibitor (bimagrumab) plus an incretin (semaglutide) for 72 weeks resulted in substantial weight reduction by augmenting fat mass reduction, while preserving lean mass.
- Considerable reductions in visceral adipose tissue, waist circumference, and hsCRP were also observed.
- Adverse events associated with bimagrumab included muscle spasms, diarrhea, and increases in cholesterol occurred with the dose and drug regimens tested in BELIEVE.
 - A phase 2 study of bimagrumab and tirzepatide, alone or in combination, is evaluating subcutaneous dosing of both drugs in adults with obesity or overweight (NCT06643728).
- These findings support further investigation of activin pathway inhibitors combined with incretins to optimize the degree and quality of weight reduction for people living with obesity.

- ❖ Phase 2 BELIEVE study in adults with obesity, treatment with the novel combination of an activin pathway inhibitor (bimagrumab) plus an incretin (semaglutide) for 72 weeks resulted in substantial weight reduction by augmenting fat mass reduction, while preserving lean mass.
- ❖ ■ **Considerable reductions in visceral adipose tissue, waist circumference, and hsCRP were also observed.**
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- ❖ ■ **These findings support further investigation of activin pathway inhibitors combined with incretins to optimize the degree and quality of weight reduction for people living with obesity.**

Summary: Efficacy

| Endpoint (% change from baseline, unless otherwise specified) | Primary + extension period (Week 72) | | |
|---|--------------------------------------|-------------|-----------------------------|
| | Bima 30 mg/kg | Sema 2.4 mg | Bima 30 mg/kg + Sema 2.4 mg |
| Body weight | -10.8% | -15.7% | -22.1% |
| Fat mass (DXA) | -28.5% | -27.8% | -45.7% |
| Lean mass (DXA) | +2.5% | -7.4% | -2.9% |
| Appendicular lean mass (DXA) | +2.3% | -9.2% | -2.6% |
| % Weight loss due to fat mass (DXA; Week 48) | 100% | 71.5% | 92.9% |
| % Participants with $\geq 20\%$ weight reduction | 10.9% | 25.0% | 69.8% |
| % Participants with $\geq 30\%$ fat mass reduction (DXA) | 50.0% | 36.4% | 94.0% |

Inventage Lab's IVL3021 (Semaglutide) & IVL3024 (Tirzepatide)

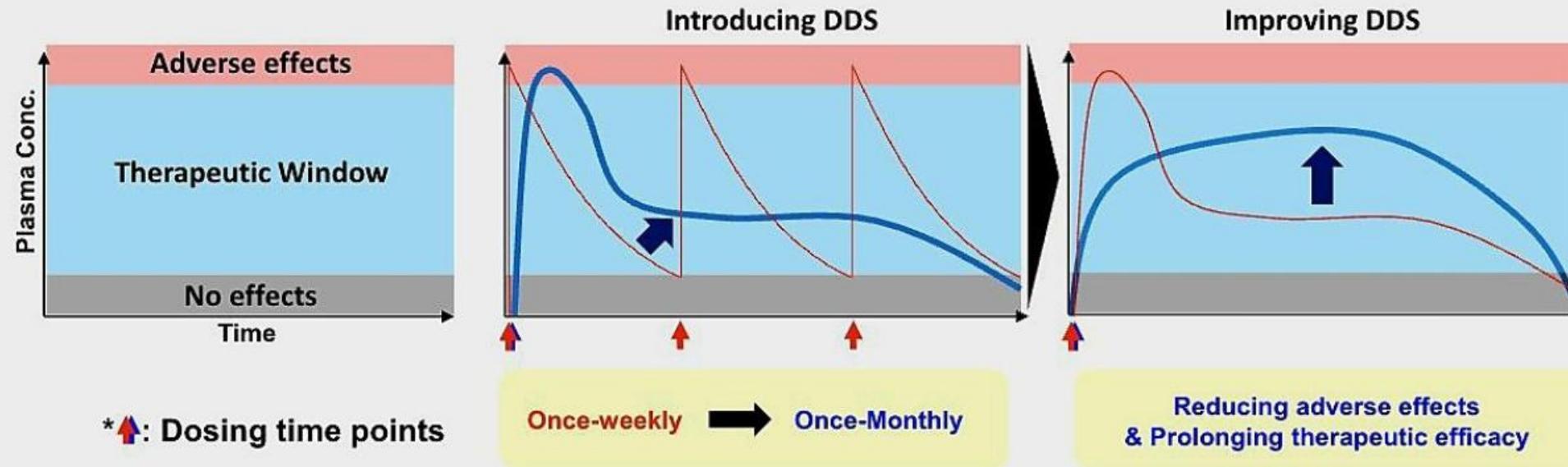
-  Innovative Platform:
 -  Microsphere-based Long-Acting Injectables (LAIs)
 -  PLGA-based biodegradable polymers
 -  >97% drug encapsulation efficiency
 -  Smooth, uniform microspheres using microfluidics tech
 -  Predetermined release: 1–12 weeks via SC/IM injection
- ◆ IVL3024 (Tirzepatide) – 4-week Data in Rats
 -  More gradual & prolonged exposure vs reference (Mounjaro)
 - ◆ Minimized initial burst
 - ◆ Maintained therapeutic levels for full 28–30 days
- ◆ IVL3021 (Semaglutide) – HFD Obese Rat Model
 -  Body weight reduction: Comparable to daily semaglutide
 -  Week-4 PK similar to reference
 -  Lowered triglycerides, AST & ALT = Metabolic benefit
 -  Single SC dose mimicked weekly SC dosing profile

#ADA2025 Poster 754-P: Once-a-Month GLP-1 Revolution?

Why It Matters:

-  **Once-monthly GLP-1s = fewer injections, better adherence**
-  **Lower GI side effects reported in preclinical data**
-  **Could be a game-changer for obesity & T2D management**
-  **Formulation optimization in progress; human trials awaited**

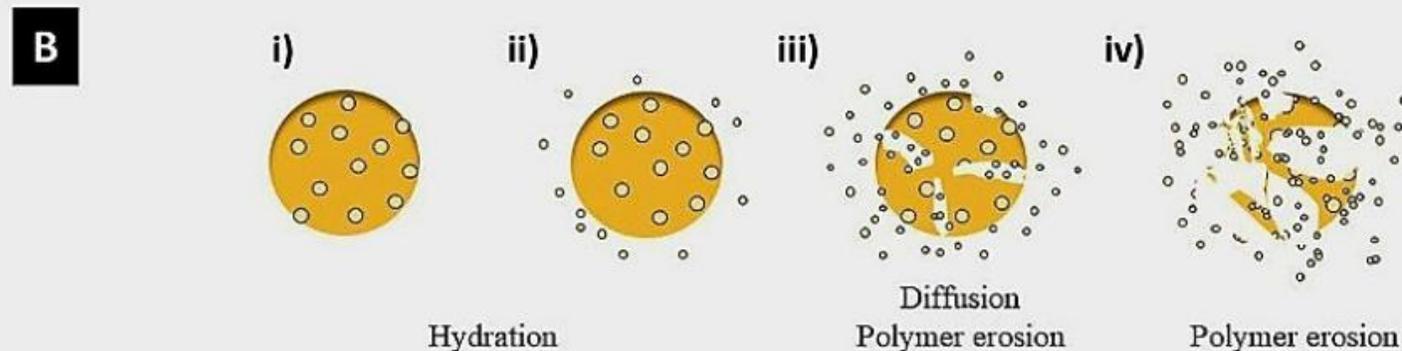
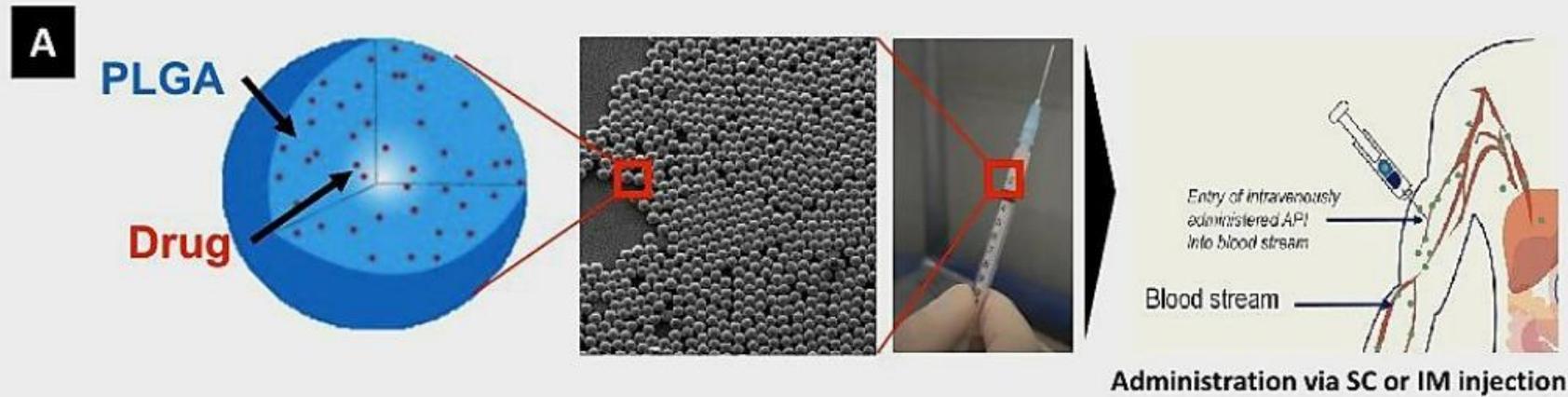
- LAI: Formulations intended for **prolonged drug release over a long period of time**
 - The key to developing LAIs: **Controlling release profiles**
 - Enhancing efficacy and improving safety



- **Advantages of LAIs for chronic disease management**
 - Replacing repetitive daily or weekly therapies with long-term therapies
 - **Improving patient adherence:** Critical for chronic conditions (e.g. diabetes and obesity)
 - **Enhancing efficacy:** Maintaining therapeutic drug levels within the therapeutic window
 - **Improving safety:** Minimizing drug burst exposure

➤ Microsphere-based drug depot

- Composed of FDA-approved biodegradable **polymers** and active pharmaceutical ingredient (**API**)
- Releasing encapsulated drug molecules into blood capillaries as the polymer degrades over a **pre-determined time in a sustained and controlled manner** (e.g. 1·3·6·12-month)



Interesting Presentation at ADA 2025

🧠 ❤️ Emotional Burden of Diabetes Tech: Often Unseen, Always Real

🔍 #ADA2025 | 🎤 Dr. Estelle M Everett

📊 Key Insights:

- 56% of patients experience moderate to extreme emotional distress with CGM & insulin pump use.
- 78% say their doctor never asks about this mental burden.
- 40% feel there are inadequate resources to cope with tech-related distress.

🔔 Clinical Pearl: 💬

"We prescribe CGMs & pumps, but forget to ask how they feel."

📌 Physicians must screen for emotional toll, not just glycemic outcomes.

🎯 Maximize benefit + Minimize distress
= 💡 True Diabetes Tech Success.

Let's not miss the invisible burden!

Emotional Burden of Diabetes Tech: Often Unseen, Always Real

cme.india



..!We prescribe CGMs, & pumps, but forget to ask *how they feel.*"

Key Insights

- 56% of patients experience **moderate to extreme emotional distress** with CGM & insulin pump use
- 78% say their doctor **never asks** about this mental burden
- 40% feel there are **inadequate resources** to cope with tech-related distress



Clinical Pearl



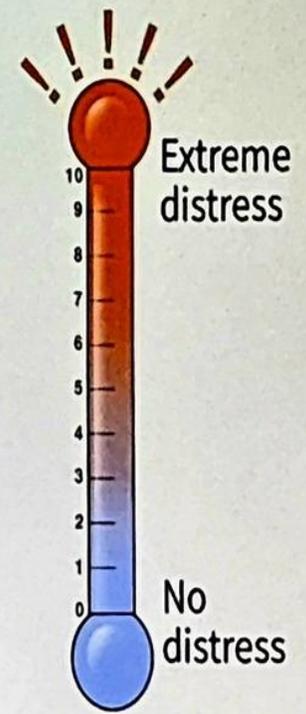
Physicians must screen for emotional toll, not just glycemic outcomes

- ▶ Maximize benefit
- ▶ Minimize distress = True Diabetes Tech Success

Let's not miss the invisible burden!

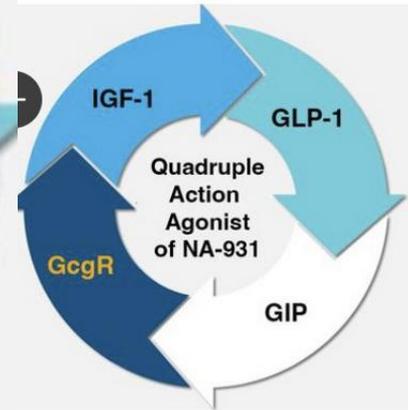
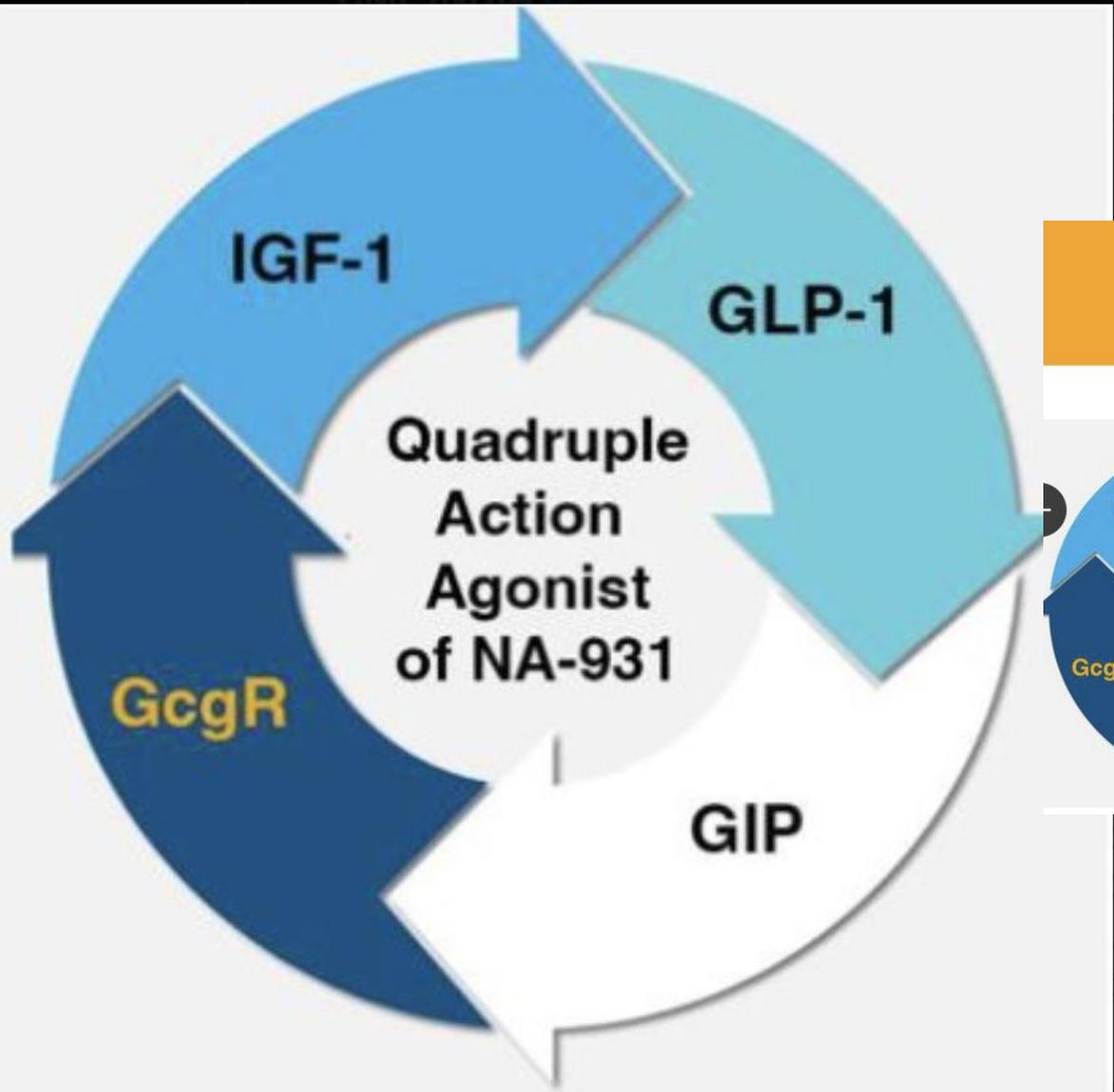
EMOTIONAL AND MENTAL BURDEN WITH DIABETES TECHNOLOGY

- 56% report *moderate to extreme* emotional and mental burden associated with CGM and insulin pump use
- 78% reported that their doctor has **never** inquired about the emotional and mental burden associated DM tech use.
- 40% feel that they **inadequate resources available** to address the emotional and mental burden associated with DM tech use.



We Four

Mechanism of Action



- IGF-1: Insulin-like Growth Hormone 1
- GLP-1: Glucagon-Like Peptide 1,
- GIP: Glucose-dependent
Insulinotropic Polypeptide
- GcgR: Glucagon Receptor



● NA-931 – First-in-Class Oral Quadruple Agonist

#ADA2025 Update | Poster
2189-LB

(GLP-1 + GIP + GlucagonR + IGF-1)

◆ Mechanism of Action

👉 Targets 4 key pathways:

- ◆ **GLP-1:** appetite suppression, insulin secretion
- ◆ **GIP:** insulinotropic effect
- ◆ **GcgR:** energy expenditure via fat oxidation
- ◆ **IGF-1:** preserves lean mass, improves metabolic tone

📊 Phase 2 RCT | n = 125 | Duration: 13 weeks

🔍 Population: BMI ≥30 OR ≥27 + comorbidity

👤 Weight Loss (Mean %)

- ◆ NA-931 (150 mg): ↓ -11.9%
- ◆ NA-931 (120 mg): ↓ -11.3%
- ◆ NA-931 (90 mg): ↓ -9.2%
- ◆ NA-931 (60 mg): ↓ -5.3%
- ◆ Placebo: ↓ -1.8%
- 📌 p = 0.001 at high dose

🛡️ Safety

- ✓ No severe AEs
- 🤢 Mild GI symptoms (nausea, vomiting, diarrhoea in <8%)
- 💪 No muscle loss observed

🧠 Clinical Insight

- ✓ First oral quadruple incretin-IGF1 agonist
- ✓ Promotes robust weight loss
- ✓ May preserve lean mass via IGF-1 synergy
- ✓ Potential game-changer for obesity + sarcopenia-prone patients

📌 CME INDIA Comment:

**"NA-931 could redefine oral obesity pharmacotherapy—combining metabolic power with muscle protection."
Stay tuned for Phase 3!**



QWINT-4 TRIAL | ADA 2025 |



Once-weekly Insulin Efsitora vs. Daily Glargine U100 in T2D Patients on Basal-Bolus Insulin

Phase 3, 26-week, open-label, randomized non-inferiority trial

730 adults with T2D on basal + prandial insulin ± up to 3 oral agents

Arms:

-  **Efsitora alfa (once-weekly basal insulin)**
-  **Glargine U100 (once-daily basal insulin)**

All received prandial insulin lispro

Key Results

Baseline HbA1c: 8.18% in both groups

Week 26 HbA1c:

-  Efsitora: 7.17%
-  Glargine: 7.18%

HbA1c change:

-  Efsitora: -1.01%
-  Glargine: -1.00%

 Non-inferior efficacy confirmed

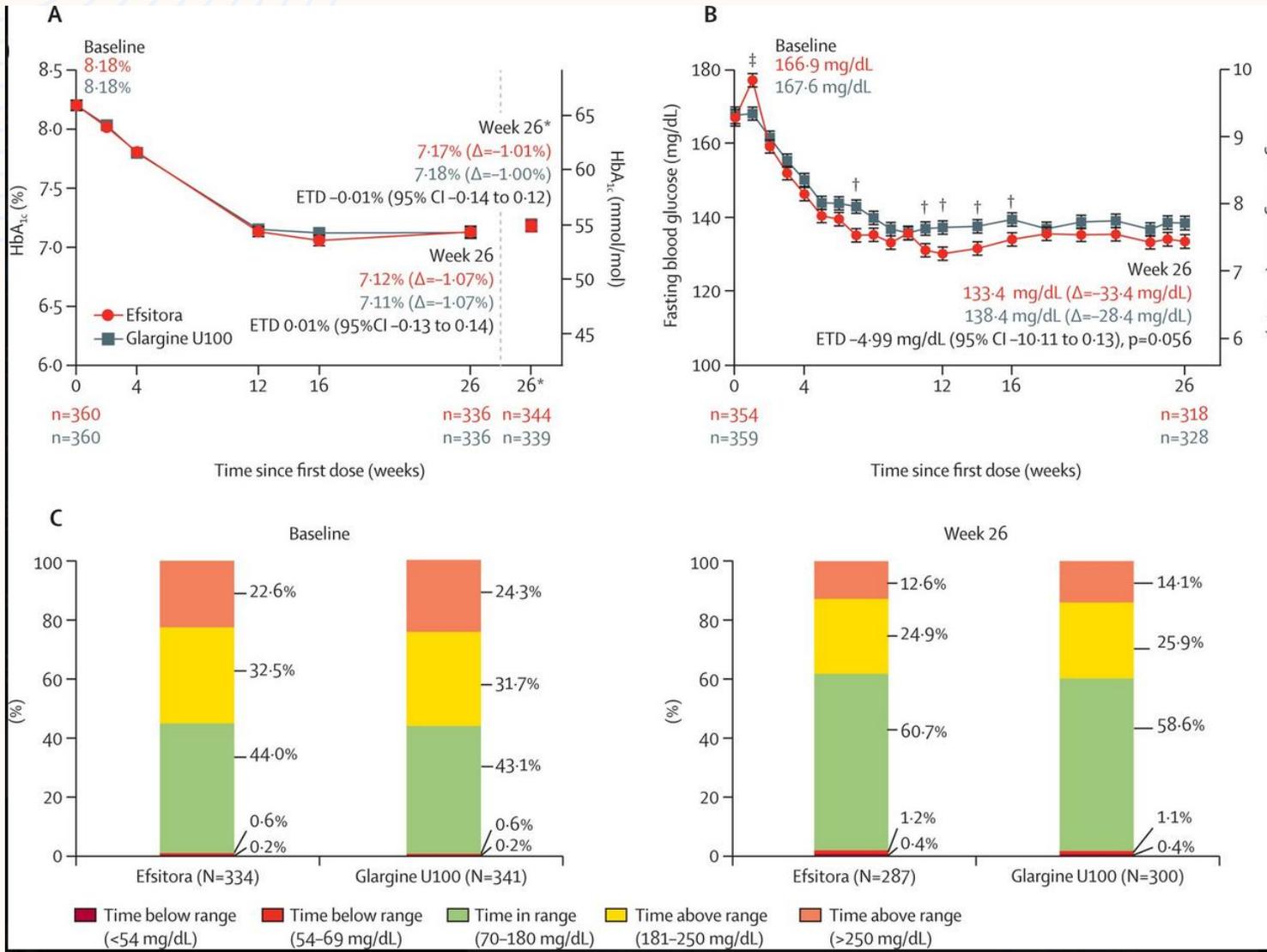
 Hypoglycaemia (Level 2/3):

Similar rates:

Efsitora 6.6 vs Glargine 5.9 events/PPYE (NS)

No significant difference in severe or nocturnal hypoglycaemia

Comparable serious adverse events (7% vs 6%)



📌 Conclusion

Once-weekly Insulin Efsitora Alfa is:

- ✓ As effective as Glargine U100
- ✓ Equally safe in terms of hypoglycaemia
- ✓ Offers reduced injection burden – a significant step in insulin innovation

📄 Clinical Implication

- ✓ Promising alternative to daily basal insulin in T2D patients already on multiple injections
- ✓ Likely to improve adherence & quality of life in real-world settings

Source: Lancet, June 2025 | DOI: 10.1016/S0140-6736(25)01069-4

GLP-1 Agonists in Alcohol Use Disorder (AUD): The Next Frontier in Addiction Medicine

From weight loss to craving control – a game-changing shift underway

What's New?

In just a few years, we've gone from 2 to 12+ active Phase 2 trials exploring GLP-1 receptor agonists in alcohol use disorders (AUD).

 **One large study is testing a triple combination: Semaglutide, Cagrilintide, and NNC0194-0499 — showing how serious the research is getting.**

GLP-1 receptor agonists may:

- ▼ Suppress dopamine-related reward from alcohol
 -  Reduce cravings and impulsivity
 - ✗ Diminish cue-induced relapse
- These effects have been seen in animal models and early human observational studies.

We're witnessing a metabolic psychiatry revolution. GLP-1s could be the first dual-purpose medication for both obesity and addiction — offering brain-gut axis modulation for lasting change in alcohol-related behavior.

Phase 2 Clinical Trials (AUD or Alcohol-Related)

| Registration | Timeline | N | Medication (Max Dose) | Duration | Status |
|--------------|-----------|-----|---|----------|----------------------|
| NCT03232112 | 2017-2020 | 127 | Exenatide (2mg) | 26 weeks | Completed |
| NCT05520775 | 2022-2024 | 48 | Semaglutide (1mg) | 8 weeks | Completed |
| NCT05895643 | 2023-2026 | 108 | Semaglutide (2.4mg) | 26 weeks | Recruitment complete |
| NCT05891587 | 2023-2025 | 80 | Semaglutide (1mg) | 12 weeks | Recruitment complete |
| NCT06015893 | 2023-2025 | 52 | Semaglutide (2.4mg) | 20 weeks | Recruiting |
| NCT05892432 | 2024-2025 | 50 | Semaglutide (7mg, oral) | 8 weeks | Recruiting |
| NCT06409130 | 2024-2026 | 240 | Semaglutide, Cagrilintide, NNC0194-0499 | 28 weeks | Recruiting |
| NCT06817356 | 2025-2026 | 300 | Mazdutide | 28 weeks | Recruiting |
| NCT06727331 | 2025-2026 | 20 | Tirzepatide (2.5mg) | 4 weeks | Not yet recruiting |
| NCT06994338 | 2025-2027 | 42 | Tirzepatide (5mg) | 8 weeks | Not yet recruiting |
| NCT06939088 | 2025-2028 | 108 | Tirzepatide | 26 weeks | Recruiting |
| NCT06546384 | 2025-2027 | 64 | Semaglutide (2.4mg) | 16 weeks | Not yet recruiting |

Switch to Water From Diet Sodas – A Simple Move With Major Impact 💧

👩 Study in 81 women with Type 2 Diabetes + Obesity/Overweight

📅 18-month RCT (Presented at ADA 2025)

📌 Intervention: Replace 5 diet drinks/week with plain water after lunch

🎯 Key Findings:

✅ Weight Loss:

◆ Water group: -6.82 ± 2.73 kg

◆ Diet drink group: -4.85 ± 2.07 kg

📊 P < 0.001

✅ Diabetes Remission:

👥 90% in water group

🚫 45% in diet soda group

📊 P < 0.0001

ADA 2025



Switch to Water From Diet Sodas May Boost Diabetes Remission

CME INDIA

- ✓ Significant ↓ in:
 - 📉 BMI, Fasting & Postprandial Glucose
 - 📉 Insulin, Triglycerides, HOMA-IR

🧠 Clinical Pearl:

Even calorie-free diet sodas may impair metabolic health.

➡ Water is more than neutral — it's therapeutic.

🗣️ “Promoting water over low-calorie alternatives may double the chance of diabetes remission” – Dr. Hamid Farshchi, D2Type



Presented at:

📍 ADA 2025, 85th Scientific Sessions, Chicago
🎓 University of Nottingham & D2Type Digital Platform

✂️ No conflicts of interest reported

Clinical pearls based on the phase 3 trial of Ecnoglutide published in The Lancet Diabetes & Endocrinology, 2025:

Ecnoglutide – A Novel GLP-1RA for Weight Management (China Phase 3 Study)

 Lancet Diabetes Endocrinol. 2025. DOI:10.1016/S2213-8587(25)00141-X

◆ Population

664 non-diabetic adults with overweight/obesity (BMI ≥ 28 or ≥ 24 with comorbidities)

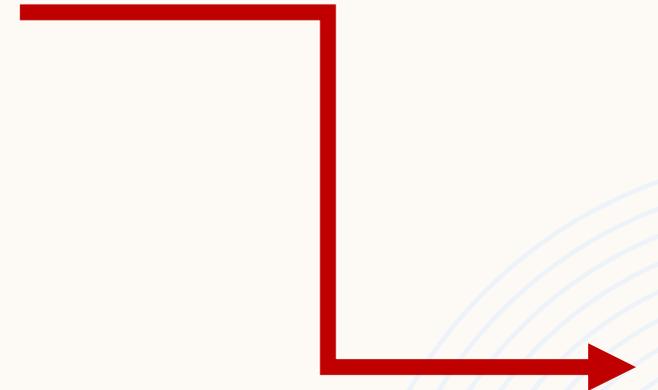
Multicentre RCT (36 sites, China)

◆ Design

Weekly subcutaneous Ecnoglutide (1.2/1.8/2.4 mg) vs placebo

Duration: 40 weeks

Primary endpoints: % bodyweight reduction & $\geq 5\%$ weight loss responders



Efficacy Results

Weight Loss at 40 Weeks:

- ◆ -13.2% at 2.4 mg
- ◆ -10.9% at 1.8 mg
- ◆ -9.1% at 1.2 mg

■ 0.1% with placebo
(All $p < 0.0001$)

≥5% Weight Loss Achieved:

✓ 87% (2.4 mg), 84% (1.8 mg),
77% (1.2 mg) vs 16% placebo

⚠ Safety Profile

TEAEs in 93% on drug vs 84% on placebo

Mostly mild-to-moderate GI symptoms

Discontinuation due to AEs: 10 patients

Clinical Takeaways

- ✓ Potent dose-dependent weight loss without diabetes
- ✓ Comparable tolerability to existing GLP-1 RAs
- ✓ Encouraging candidate for obesity pharmacotherapy in non-diabetics
- 📌 Further data awaited in diverse global populations

[https://thelancet.com/journals/landia/article/PIIS2213-8587\(25\)00141-X/abstract](https://thelancet.com/journals/landia/article/PIIS2213-8587(25)00141-X/abstract)

Eloralintide – Long-Acting Amylin Enters the Arena

 **Once-weekly amylin receptor agonist shows early weight loss signal with good tolerability**

Phase 1 (n=100; BMI 27–43)

Doses: 5 cohorts of QW SC injections vs placebo

Mean WL at 12 wks (LS): –2.6% to –11.3%

Half-life: ~14–16 days  No deaths, 1 unrelated

Amylin monotherapy with promising profile

 Moving on to Phase 2 trials  Poster 882-P#Obesity #Amylin #Eloralintide #WeightLoss

KEY RESULTS

PK of Eloralintide: Steady-State Exposures Approximately Dose Proportional, With Half-Life Suited for Once-Weekly Dosing

| | Eloralintide Dose | | | |
|---|---------------------|---------------------|--------------------|--------------------|
| | Dose 1 (N=8) | Dose 2 (N=6) | Dose 3 (N=23) | Dose 4 (N=36) |
| AUC(0-∞), ng•h/mL | 211,000 (17) | 548,000 (25) | 1,290,000 (25) | 2,460,000 (24) |
| AUC _{τ,ss} , ng•h/mL | 61,300 (18) | 159,000 (22) | 347,000 (19) | 652,000 (17) |
| AUC(0-t _{last}), ng•h/mL | 204,000 (17) | 530,000 (24) | 1,240,000 (24) | 2,350,000 (22) |
| %AUC(t _{last} -∞), % | 3.46 (18) | 2.98 (56) | 3.49 (38) | 4.34 (44) |
| C _{max} , ng/mL | 414 (18) | 1090 (27) | 2280 (19) | 4400 (17) |
| t _{max} , median (range), h | 48.0 (12.1-70.2) | 35.9 (12.0-72.0) | 24.1 (0.0-72.0) | 24.0 (0.0-72.0) |
| t _{1/2} , geometric mean (range), h | 375 (335-436) | 333 (281-414) | 347 (262-422) | 378 (300-499) |

Note: Data are geometric mean (geometric CV%) unless stated otherwise.

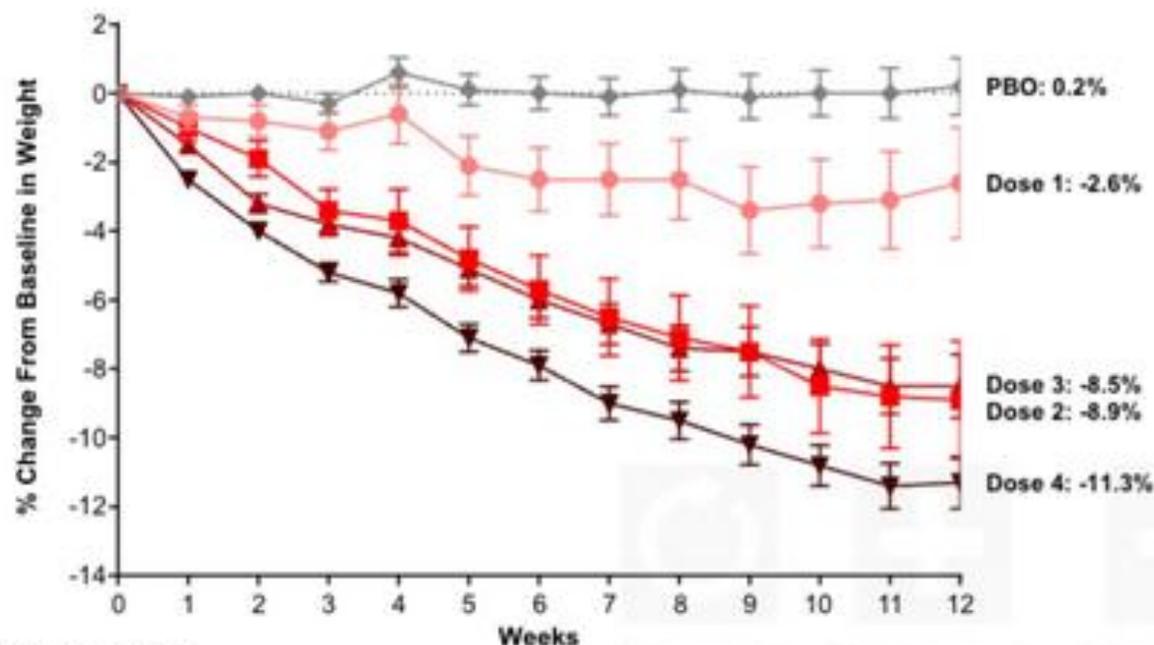
- At Week 12, the increase in AUC(0-∞), AUC_{τ,ss}, and C_{max} were dose proportional, with ratios of dose-normalized geometric means of 1.2, 1.1, and 1.0, respectively
- The terminal geometric mean t_{1/2} was 333-378 hours (13.9-15.8 days) across the dose range

Multiple Doses of Eloralintide Were Well Tolerated in Participants With Obesity or Overweight

| AEs Number of AEs (Number of Participants With AEs) [% of Participants With AEs] | Placebo SC QW (N=27) | Eloralintide Dose (SC QW) | | | | |
|---|----------------------------|---------------------------|-----------------|------------------|------------------|--------------------|
| | | Dose 1 (N=8) | Dose 2 (N=6) | Dose 3 (N=23) | Dose 4 (N=36) | Overall (N=100) |
| All TEAEs | 18 [15] (55.6) | 5 [5] (62.5) | 9 [4] (66.7) | 41 [14] (60.9) | 69 [21] (58.3) | 142 [59] (59.0) |
| Treatment-related AEs | 2 [2] (7.4) | 1 [1] (12.5) | 2 [1] (16.7) | 24 [10] (43.5) | 43 [16] (44.4) | 72 [30] (30.0) |
| Fatal AEs | 0 | 0 | 0 | 0 | 0 | 0 |
| Serious AEs | 1 [1] (3.7) | 0 | 0 | 1 [1] (4.3) | 0 | 2 [2] (2.0) |
| Treatment-related serious AEs | 0 | 0 | 0 | 0 | 0 | 0 |
| AEs leading to discontinuation from study | 2 [2] (7.4) | 2 [2] (25.0) | 0 | 3 [3] (13.0) | 6 [6] (16.7) | 13 [13] (13.0) |
| AEs of special interest | 1 [1] (3.7) | 0 | 3 [3] (50.0) | 16 [9] (39.1) | 21 [12] (33.3) | 41 [25] (25.0) |

- The majority of AEs reported were of mild severity; decreased appetite was the most common TEAE

Dose- and Time-Dependent Weight Loss



Note: Data are LSM (SE).

[Print this Page for Your Records](#) [Close Window](#)

Control/Tracking Number: 2025-LB-6499-Diabetes

Activity: Late Breaking Abstract

Current Date/Time: 3/10/2025 8:18:40 AM

Community Based Screening for Non-Communicable Diseases and Medication Adherence Among Attendees of Mahakumbh Mela 2025: A Cross-Sectional Study.

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Abstract:

Introduction and Objective: Non-communicable diseases (NCDs) such as diabetes, hypertension, and obesity pose a growing public health challenge in India. The Mahakumbh Mela 2025, the world's largest religious gathering, provides a unique opportunity for large-scale NCD screening and awareness. This study aimed to estimate the prevalence of diabetes, hypertension, and obesity among attendees while assessing risk factors as well as poor therapeutic compliance in such religious gatherings with the intention to promote appropriate timely intervention.

Methods: A cross-sectional observational study was conducted at the Mahakumbh Mela, Prayagraj, between January 20 and February 26, 2025. Participants (n=27,045) voluntarily attended health screening camps. Demographic details, BMI, blood pressure (BP), and random blood sugar (RBS) were recorded. The inclusion criteria encompassed adults aged ≥ 18 years, excluding pregnant women.

Results: The mean age of attendees was 49.4 ± 14.2 years, with a gender split of males (67.2%) and females (32.8%). Of the sample, 25% had type 2 diabetes (T2D), 16% had hypertension, and 5% had cardiovascular conditions, with 29% having at least one of these NCDs. The overlap between conditions was notable, with 50% of T2D patients also having hypertension. Medication adherence was a concern, as 28.5% of T2D, 43.6% of hypertensive, and 61.4% of CVD patients forgot their medications. Additionally, 26.2% of people with diabetes and 37.6% of individuals with hypertension consumed tobacco.

Conclusion: The findings highlight the high burden of NCDs among Mahakumbh attendees and the urgent need for early detection and public health interventions. The study underscores the potential of mass gatherings as platforms for health promotion and policy-driven interventions to reach underserved populations.

Category (Complete): 17-C Epidemiology—Clinical—Diagnosis and Screening

Keyword (Complete): Digital Health Education



Mahakumbh AT
ADA

Community-Based Screening for Non-Communicable Diseases (NCDs) and Medication Adherence Among Attendees of Mahakumbh Mela 2025

 Key Highlights from the Late Breaking Abstract (2025-LB-6499-Diabetes):

 **Sample size: 27,045 adults screened**

 **Mean age: 49.4 ± 14.2 years**

 **Males: 67.2%** |  **Females: 32.8%**

NCD Prevalence:

Type 2 Diabetes (T2D): 25%

Hypertension (HTN): 16%

Cardiovascular Disease (CVD): 5%

≥1 NCD: Found in 29% of participants

Alarming Findings:

50% of T2D patients also had HTN

Medication non-adherence:

28.5% of T2D

43.6% of HTN

61.4% of CVD patients forgot their meds

Addictive habits:

Tobacco use: 26.2% (T2D) and 37.6% (HTN)

Alcohol use: 14.1% (T2D)



PREVALENCE OF DIABETES, HYPERTENSION, AND CARDIOVASCULAR DISORDERS IN ADULTS ATTENDING THE MAHAKUMBH MELA 2025



VIJAY VISWANATHAN, RAJESH KESARI, ANUBHA SRIVASTAVA, AMIT GUPTA, AJAY TEWARI, SANJAY AGARWAL, RAKESH K. SAHAY, BANSHI D. SABOO, NARSINGH VERMA, NAGENDRA K. SINGH, ARAVINDA J, MANOJ S. CHAWLA, SUNIL S. GUPTA, PRAHLAD CHAWLA, PURVI M. CHAWLA, SHUBHASHREE M. PATIL, ANITA NAMBIAR, SUBODH JAIN, JOTHYDEV KESAVADEV, ANUJ MAHESHWARI

BACKGROUND & OBJECTIVE

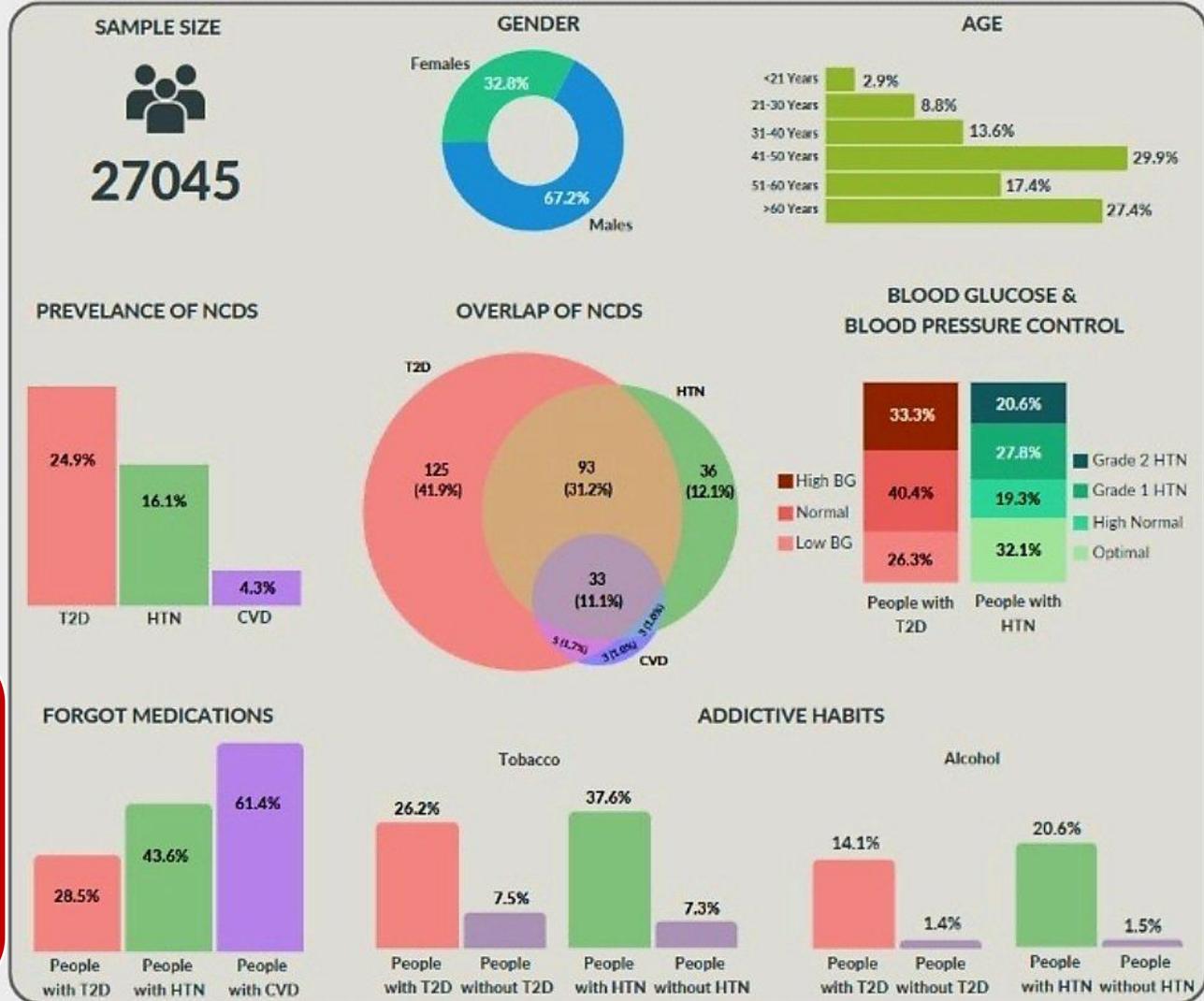
This study demonstrates that mass religious events can become powerful platforms for NCD detection, education, and intervention in underserved populations.

Demographic details, body mass index (BMI), blood pressure (BP), and random blood sugar (RBS) were recorded. The inclusion criteria encompassed adults aged ≥ 18 years, excluding pregnant women.

RESULTS

The mean age of attendees was 49.4 ± 14.2 years, with a gender split of males (67.2%) and females (32.8%). Of the sample, 25% had T2D, 16% had HTN, and 5% had CVD, with 29% having at least one of these NCDs.

“Health interventions must go where the people are. Mahakumbh offered us a rare lens into real-world NCD burden and behavior.”



Final Points

The Future of Diabetes & Obesity Care is Here 🌟

🔥 Breakthroughs from the world's leading diabetes congress — from once-monthly GLP-1s to oral nonpeptides, muscle-preserving combos, and AI-powered care.

◆ 1. Once-Monthly MariTide (Amgen)

➡ A novel GLP-1 RA dosed monthly

🔍 While weight loss was modest, convenience = better adherence, making it a practical contender in real-world settings.

◆ 2. Orforglipron (ACHIEVE-1 Trial, Eli Lilly)

💊 First oral nonpeptide GLP-1 RA

✅ No injection, no refrigeration

✅ Food-independent dosing

✅ Lower cost potential

🚀 Game-changer for T2D therapy access and scalability.

◆ **3. BELIEVE Study: Bimagrumab + Semaglutide Combo**

 Can we preserve muscle while losing fat?

 This novel combo stimulates skeletal muscle growth, addressing sarcopenia risk with GLP-1 RAs.

 First-of-its-kind attempt to enhance "quality of weight loss."

◆ **4. CagriSema (REDEFINE 1 & 2 Trials)**

 A dual hit: GLP-1 (semaglutide) + amylin analog (cagrilintide)

 Multi-target approach to weight loss

 A promising next-gen obesity drug from Novo Nordisk.

◆ **5. ADJUST-T1D Trial**

 Semaglutide + automated insulin delivery in Type 1 DM

 Evaluating metabolic + weight benefits in T1D—a paradigm shift for this lean-diabetes phenotype.

◆ **Other Late-Breaking Updates**

 SOUL Trial – Oral semaglutide improves CV outcomes in high-risk T2D

 STRIDE Trial – Semaglutide shows promise in PAD

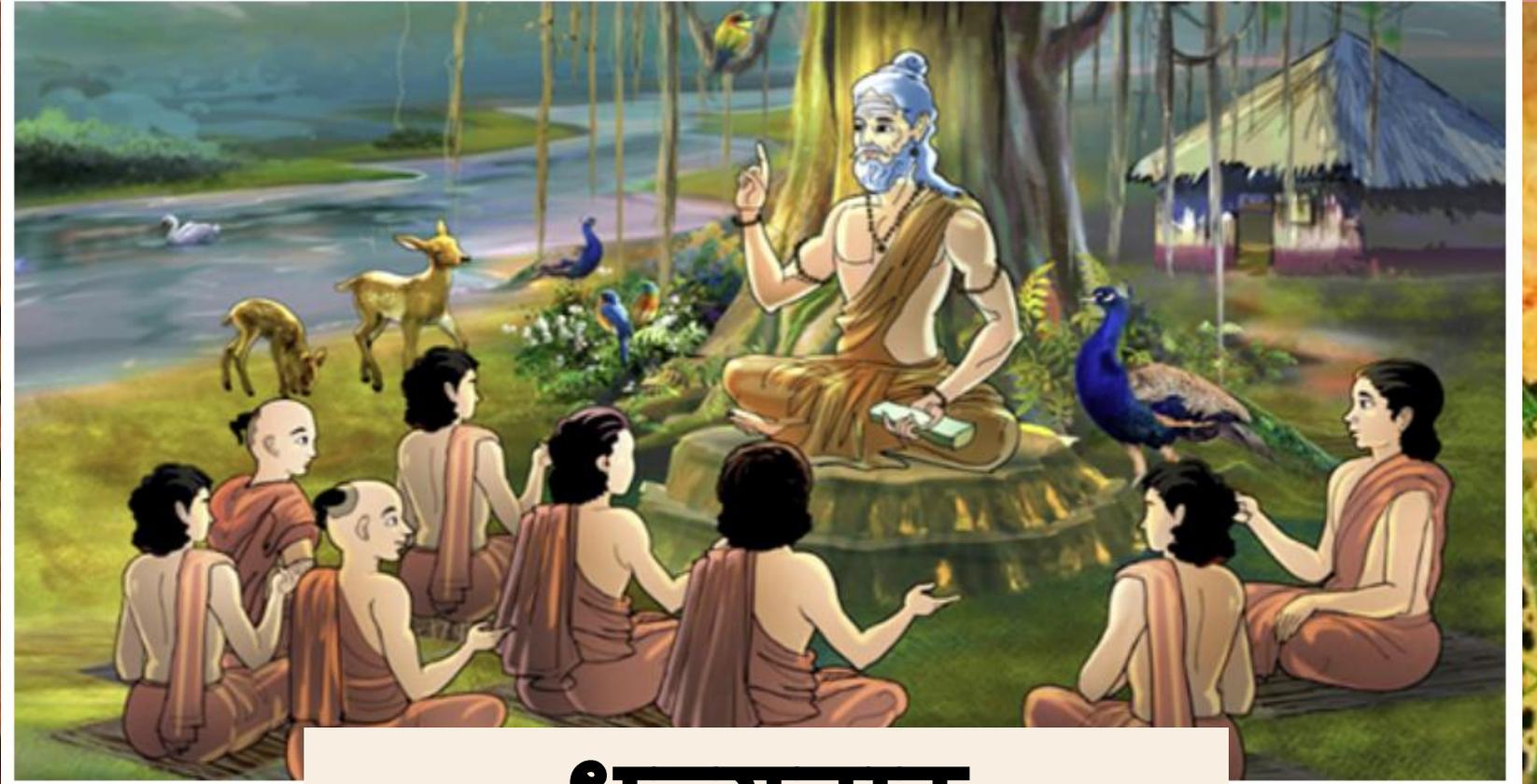
 CATALYST Trial – Uncovers link between hypercortisolism & poor glycemic control

 PATHWEIGH – Real-world obesity care in primary care settings

 AI in Diabetes Care – Smarter insulin dosing, real-time CGM analytics

 Stem Cell-Derived Islet Transplants – Hope for T1D cure on the horizon

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