



48-Week Results from the Phase 2, Open-Label Study Evaluating an Oral, Fixed-Dose Combination of Sodium Phenylbutyrate and Taurursodiol (PB&TURSO) in Wolfram Syndrome

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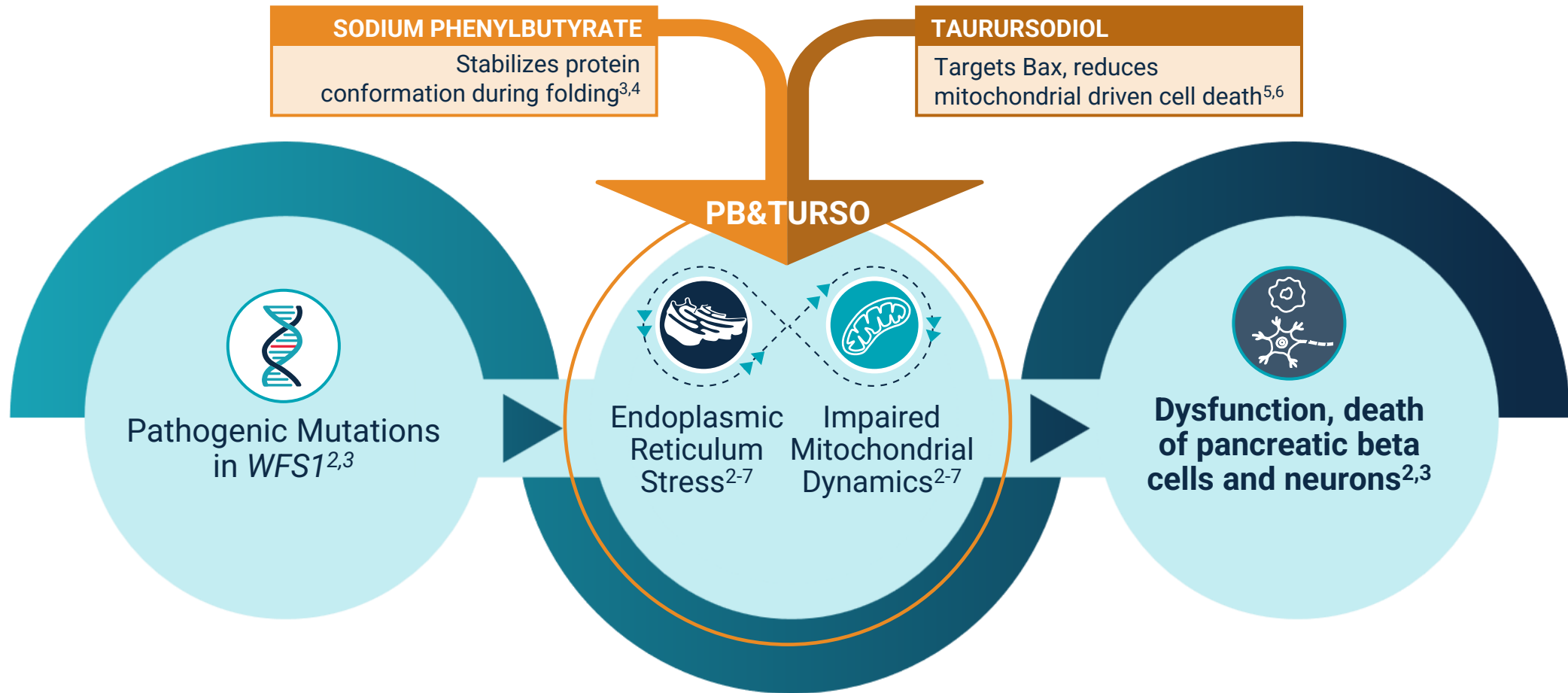


Please Note

PB&TURSO is investigational and is not approved by any health authority.

This presentation is intended to provide scientific information about PB&TURSO and the HELIOS trial in Wolfram syndrome (WS). The statements and content shared in this presentation have not been evaluated by any health authority.

PB&TURSO Targets Endoplasmic Reticulum Stress and Related Mitochondrial Dysfunction Pathways



Encouraging Preclinical Data Show Therapeutic Potential of PB&TURSO in Wolfram Syndrome



Improvement
in Insulin Secretion in
Patient-Derived
Pancreatic Beta Cells



Improvement in Cell
Viability in Patient-
Derived Pancreatic
Beta Cells



Improvement in Cell
Viability in Patient-
Derived Neuronal
Cells



Statistically Significant Delay
in Diabetes Progression in
Wfs1-deficient Mice

DATA AVAILABLE AT

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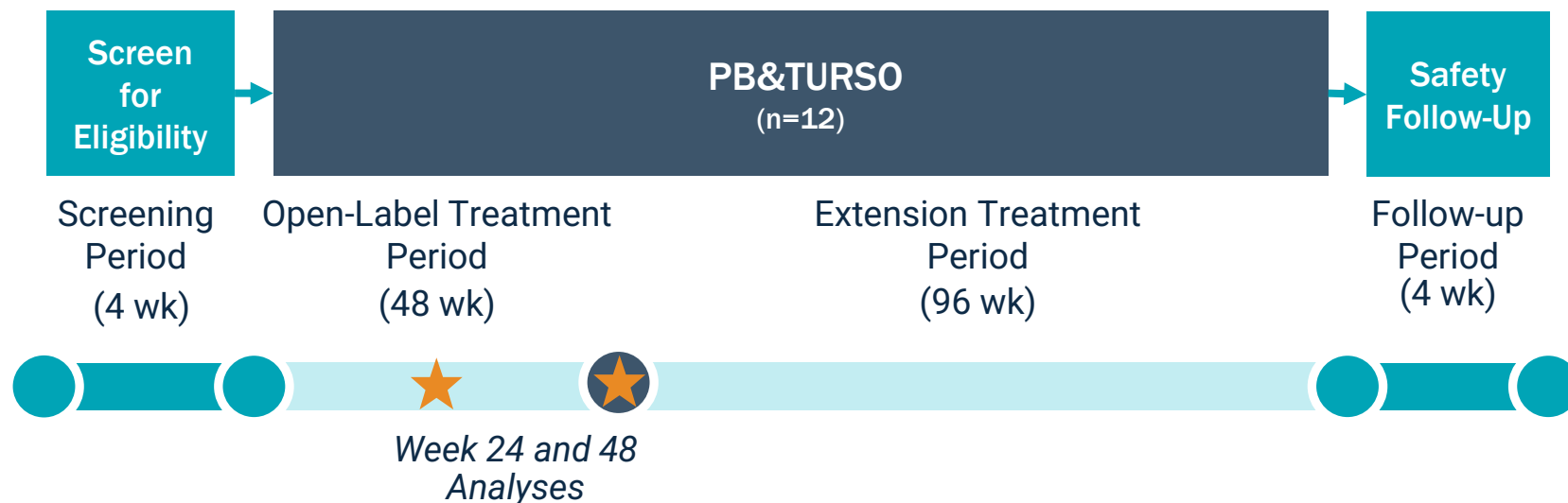


HELIOS Trial Design



Primary Objectives:

- To assess the safety and tolerability of PB&TURSO administered orally for up to 144 weeks
- To evaluate the effect of PB&TURSO on residual beta cell function by monitoring C-peptide levels during a 0-240 minute mixed-meal tolerance test (MMTT)



Key inclusion criteria

- Aged ≥ 17 years
- Documented functionally relevant recessive mutations on both alleles of the *WFS1* gene based on historical test results (if available) or from a qualified laboratory at screening
- Stimulated C-peptide level of ≥ 0.2 ng/mL at screening
- Insulin-dependent diabetes mellitus due to Wolfram syndrome
- No current GLP-1 agonist use

HELIOS Trial Design - Endpoints

Primary Efficacy

- Change from baseline in **C-peptide** (Δ C-peptide, AUC C-peptide) at Week 24 measured during 240-minute MMTTs

Key Secondary Efficacy

- **C-peptide AUC response** to a 240-minute MMTT at Week 48
- Change from baseline in **HbA1c level**
- Change from baseline in **exogenous insulin dose**
- Change from baseline in **overall time in target glucose range (70–180 mg/dL)**
- Change from baseline in **best-corrected visual acuity** on the LogMAR scale using the Snellen chart

Participant Baseline Characteristics

Median Age:
25 years (range: 18 to 39)



Male:
2 (17%)



Female:
10 (83%)

Median Time Since WS Diagnosis:
5 years (range: 0.4 to 15)



Median Age at Diagnosis
21 (range: 8 to 36)

Median Age of Symptom Onset, Years (Range)



Diabetes Mellitus
9 (3 to 33)



Diabetes Insipidus*
11 (8 to 24)



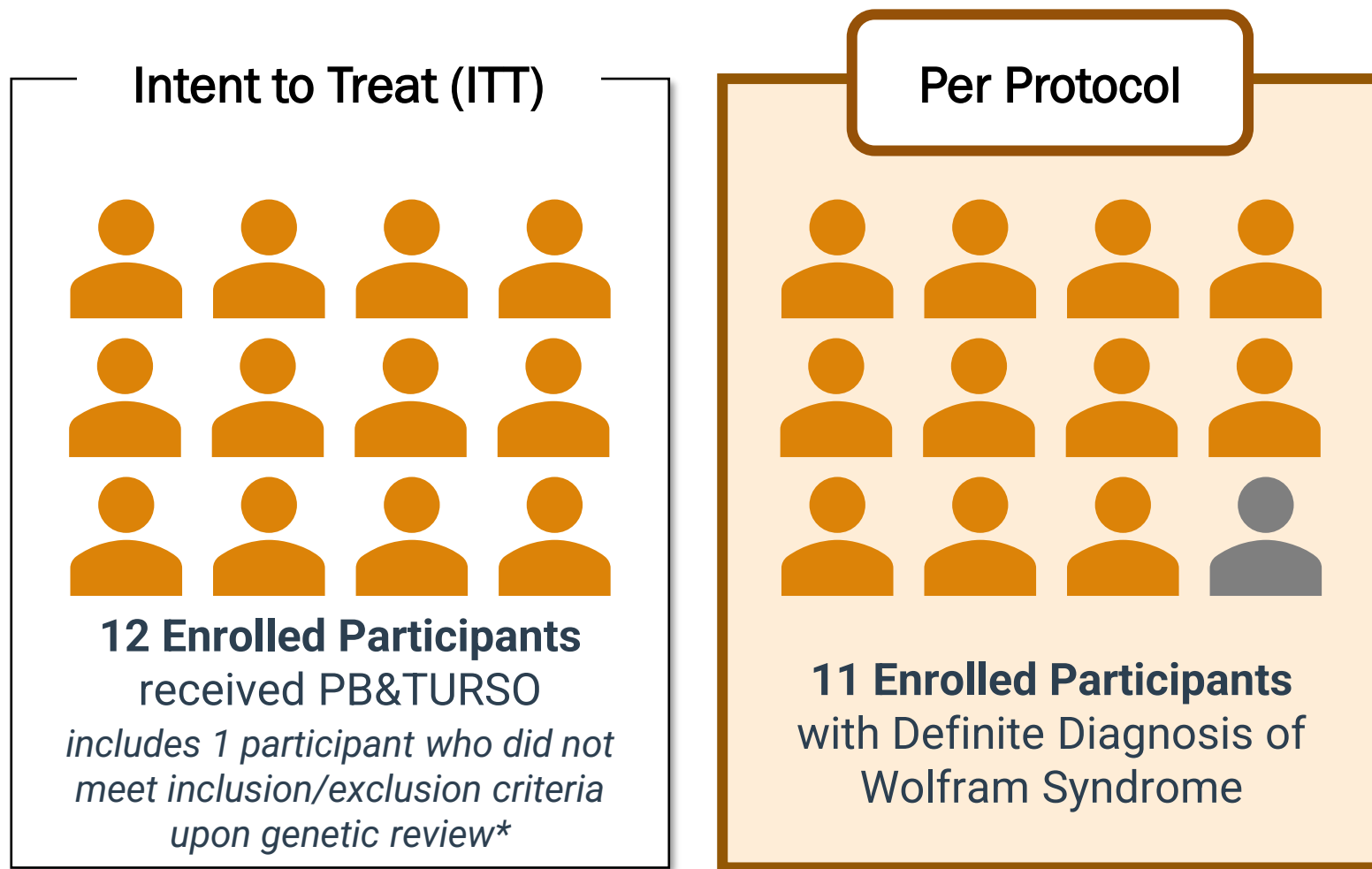
Vision Loss
12 (5 to 29)



Hearing Loss**
16 (7 to 34)

*N=4; **N=5

Key HELIOS Analysis Populations



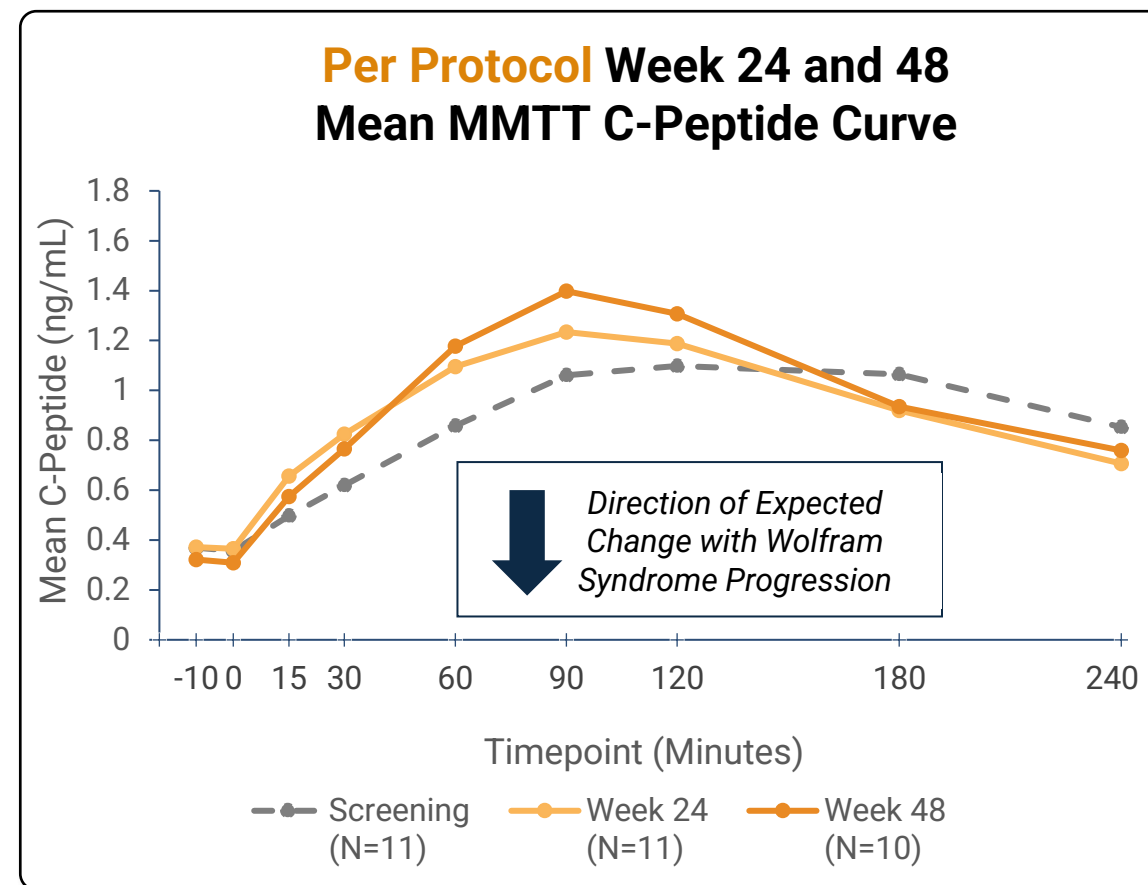
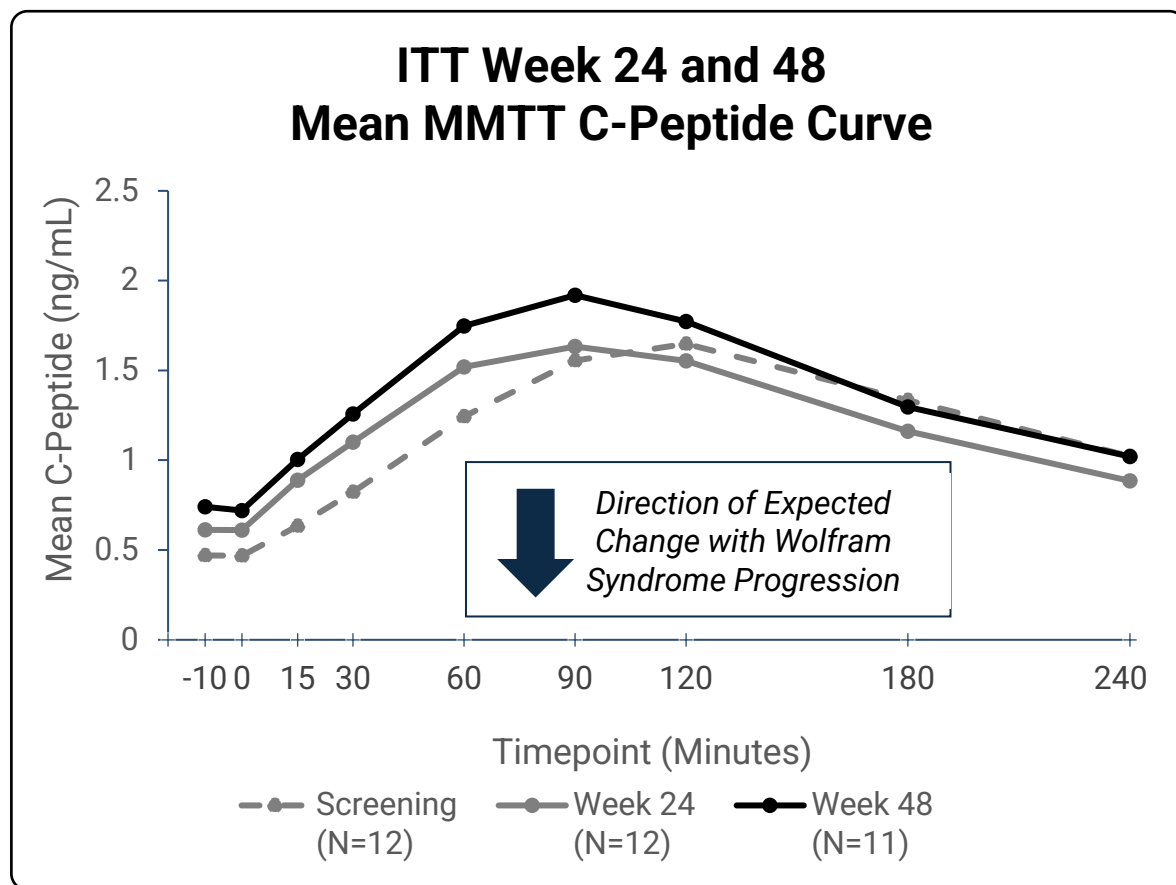
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*Participant found to have an autosomal recessive mutation confirmed to be pathogenic on just one of the two alleles and variant of uncertain significance on the other allele. Participant was within normal range for C-peptide, glycemic measures, and vision throughout suggesting lack of typical WS phenotype. In addition, this participant discontinued insulin ~ 3 months after enrolling in the trial, and continues longstanding oral anti-diabetic medication.

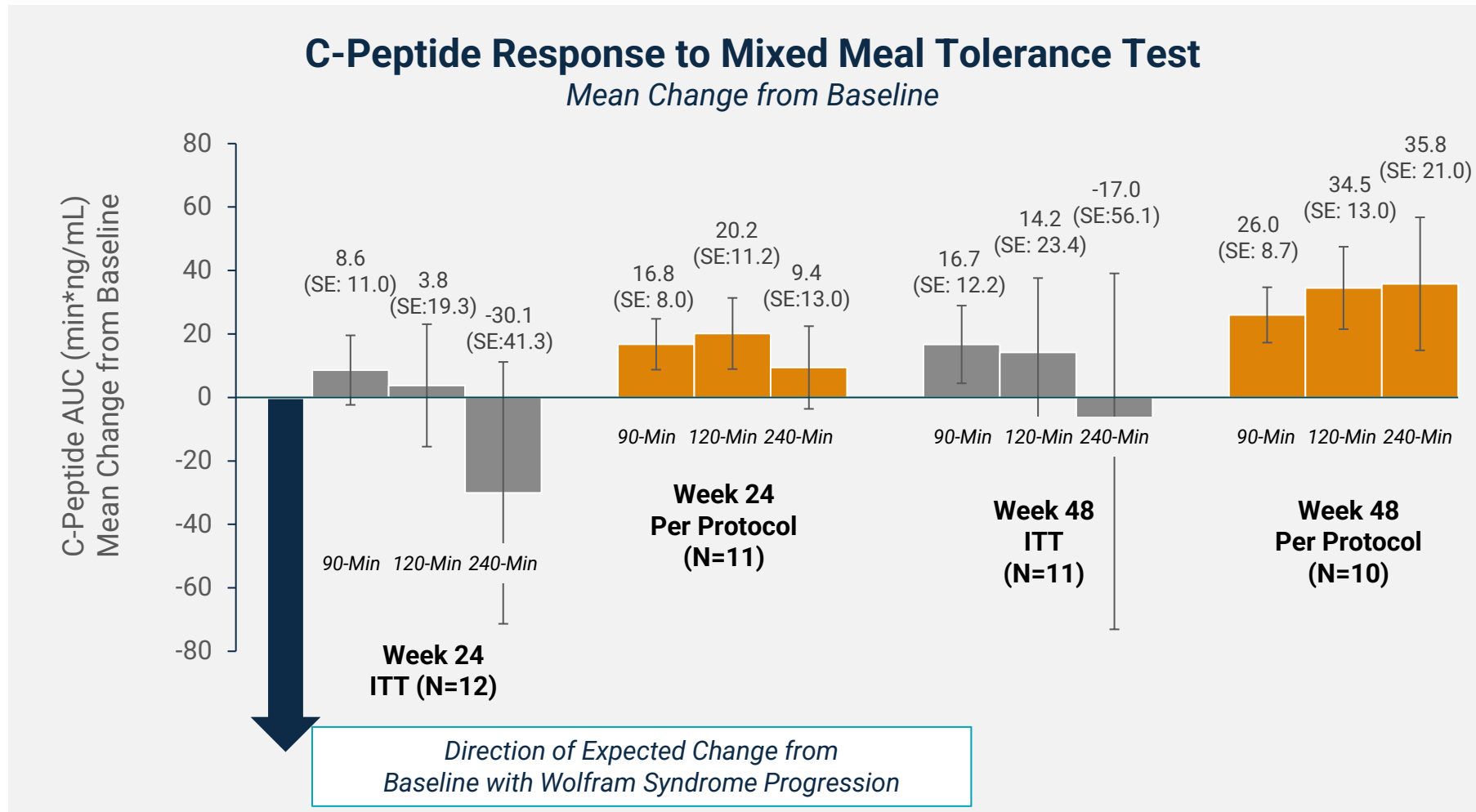
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Primary Endpoint: C-Peptide Response

Improvement in average beta cell responsiveness at Week 24 and 48 compared to Screening



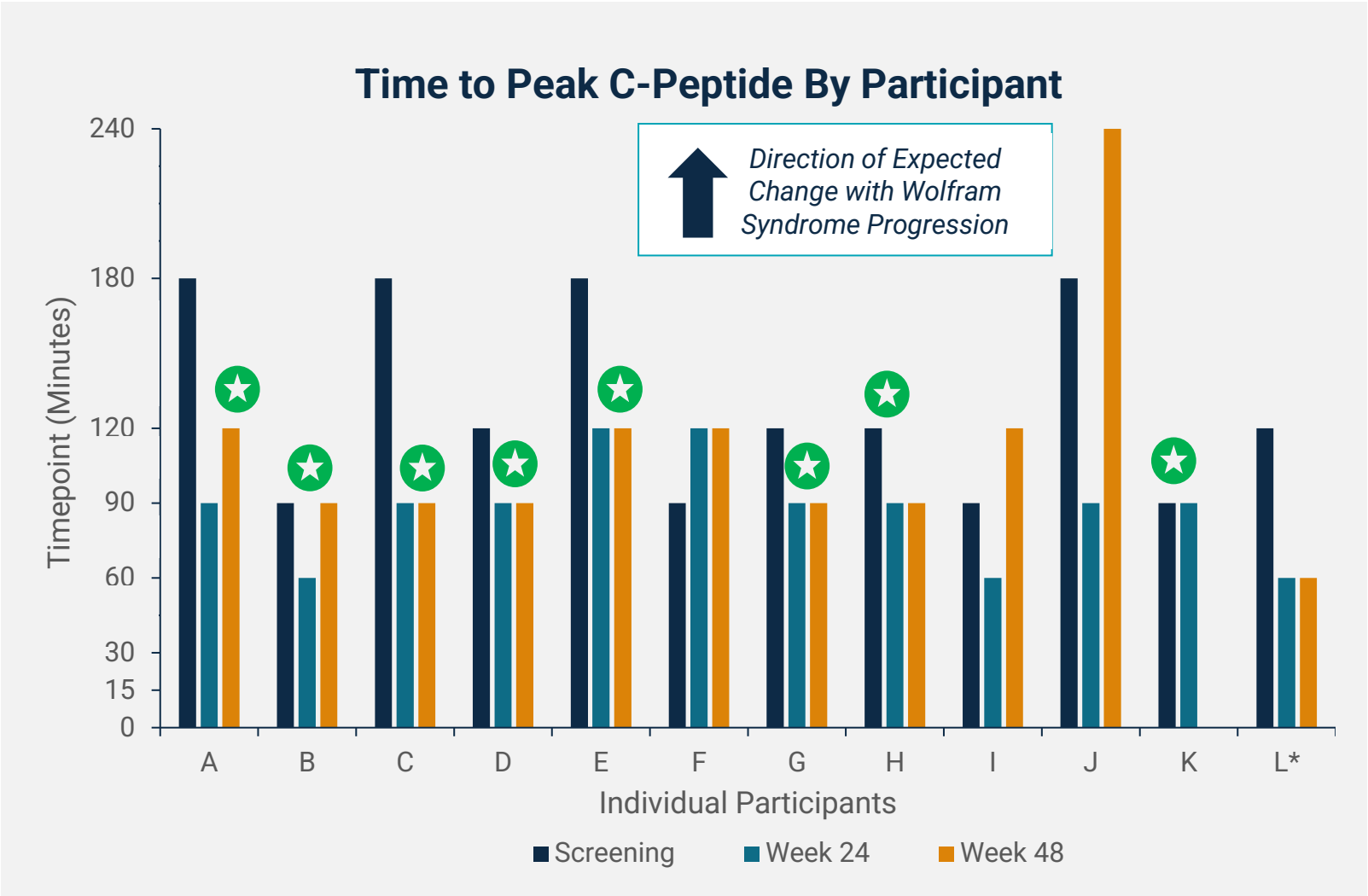
Primary Endpoint: C-Peptide Response (AUC of Levels)



**Improvement in
in C-Peptide
Response Observed
Compared to
Screening**

**20% and 52%
increase at Week 24
and 48, respectively
from 0-120 minutes
in the Per Protocol
population**

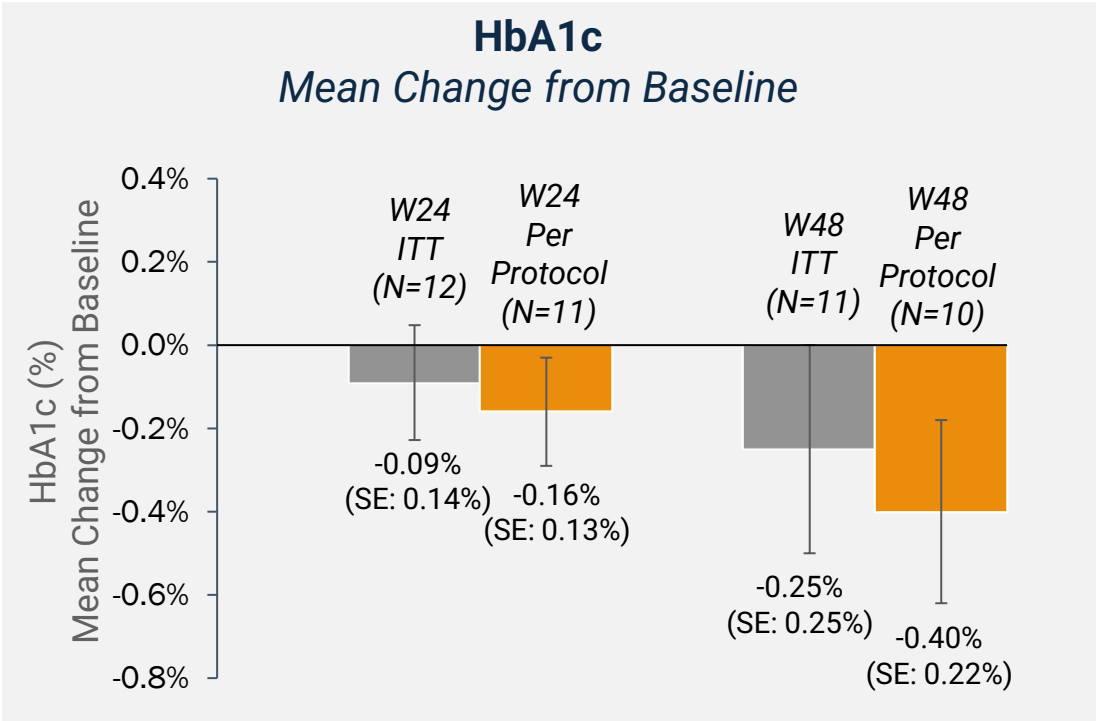
Additional MMTT Analyses: Time to Peak C-Peptide



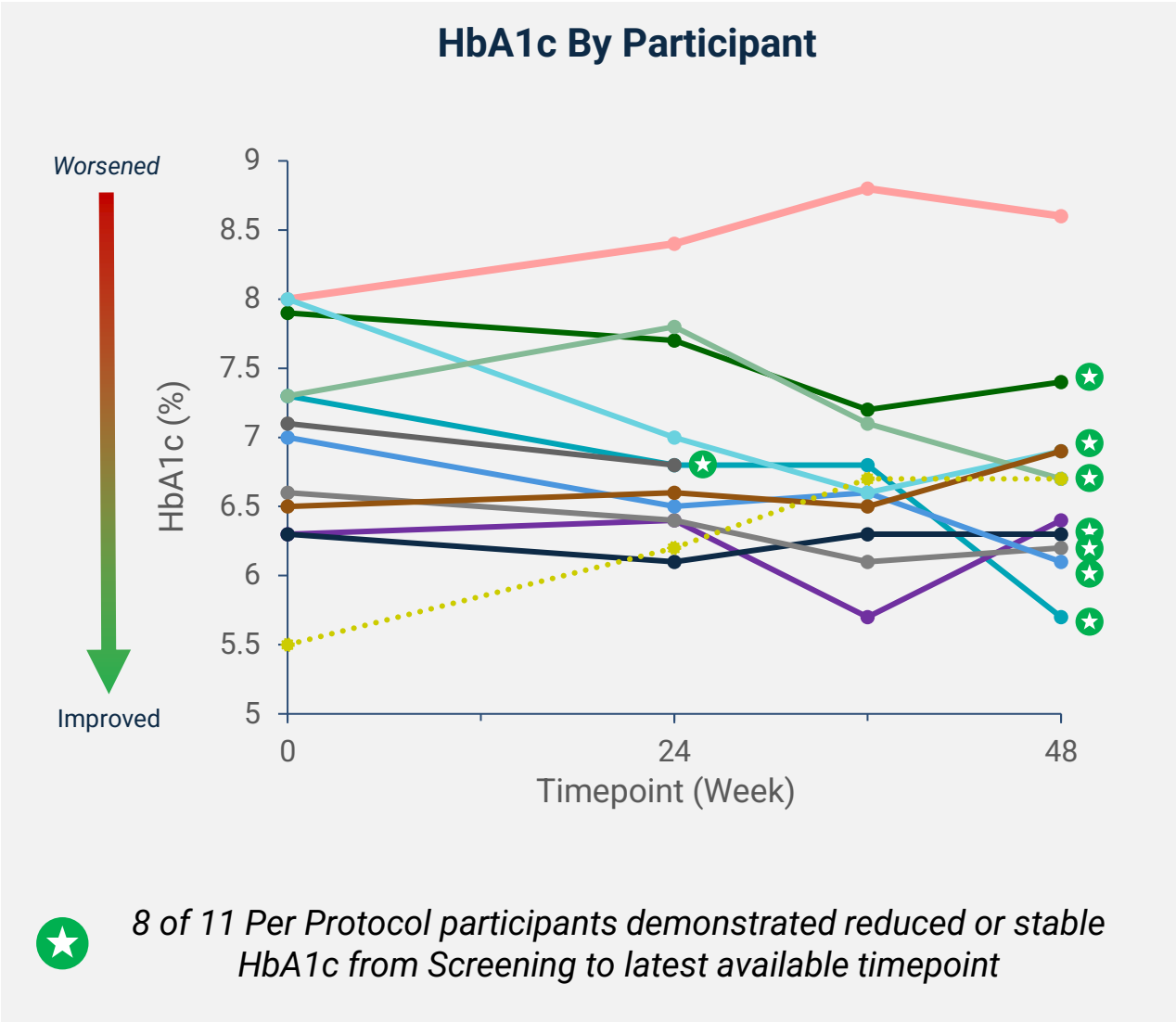
8 of 11 Per Protocol Participants Demonstrated Stable or Improved Pancreatic Function at Latest Available Timepoint Compared to Screening as Measured by Time to Peak C-Peptide

*Participant not included in the Per Protocol population
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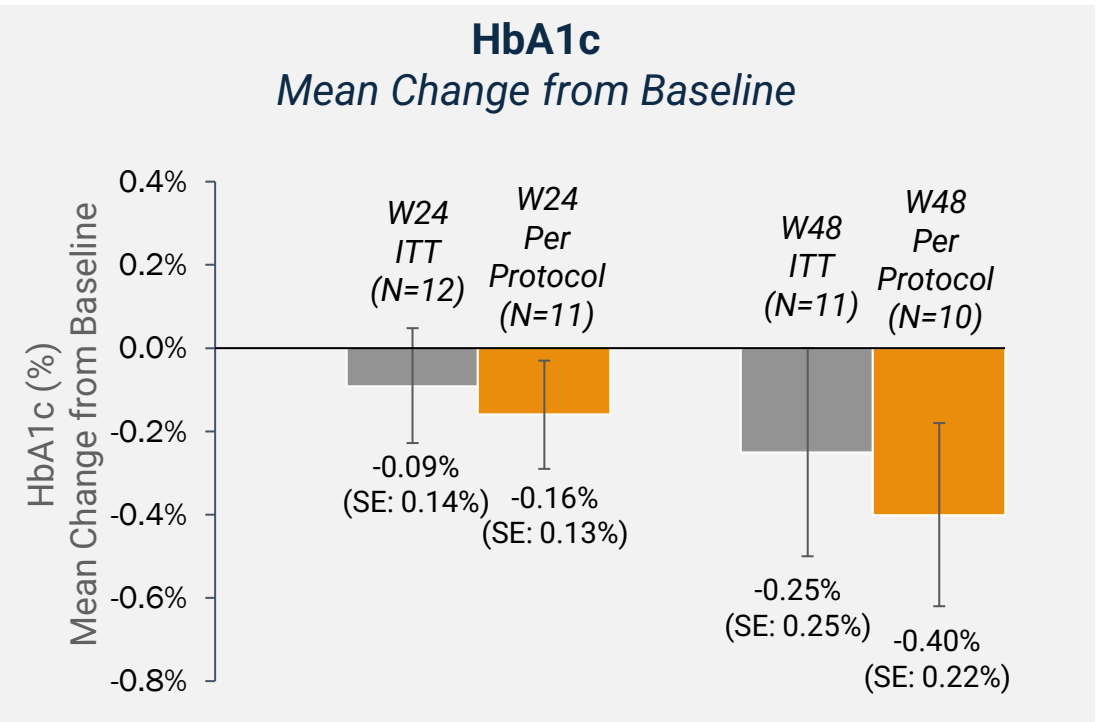
Secondary Endpoint: HbA1c



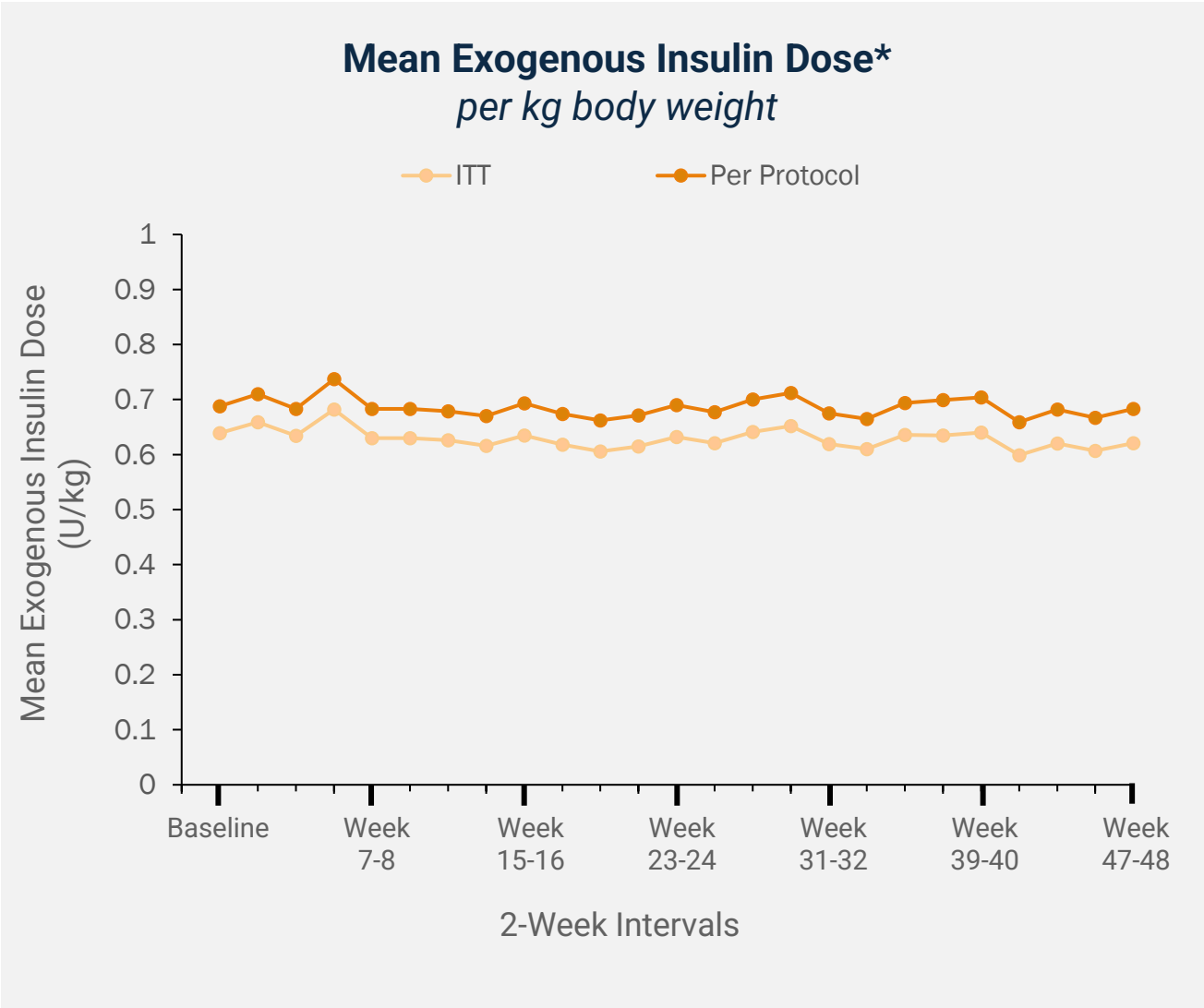
Improved Glycemic Control as Measured by HbA1c Compared to Screening



Secondary Endpoint: HbA1c and Exogenous Insulin Dose

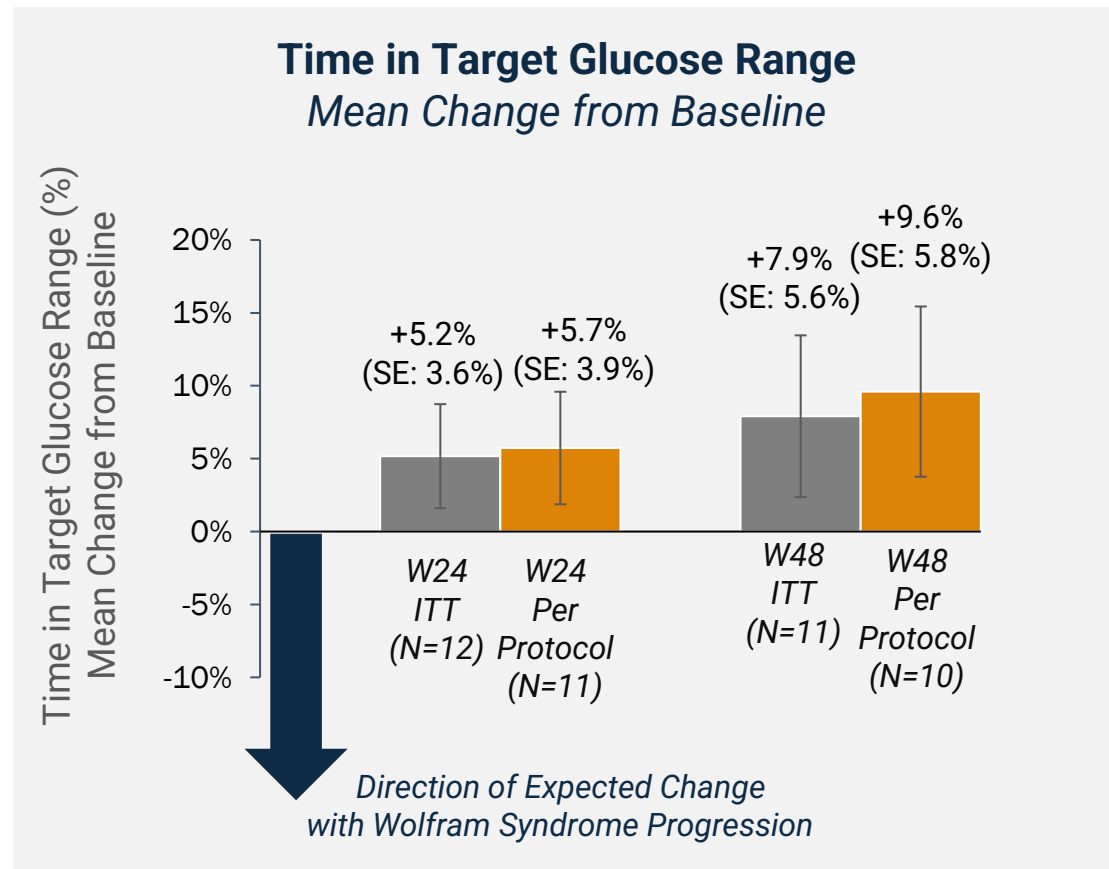


Improved Glycemic Control as Measured by HbA1c at Week 24 Compared to Screening Despite Consistent Insulin Use

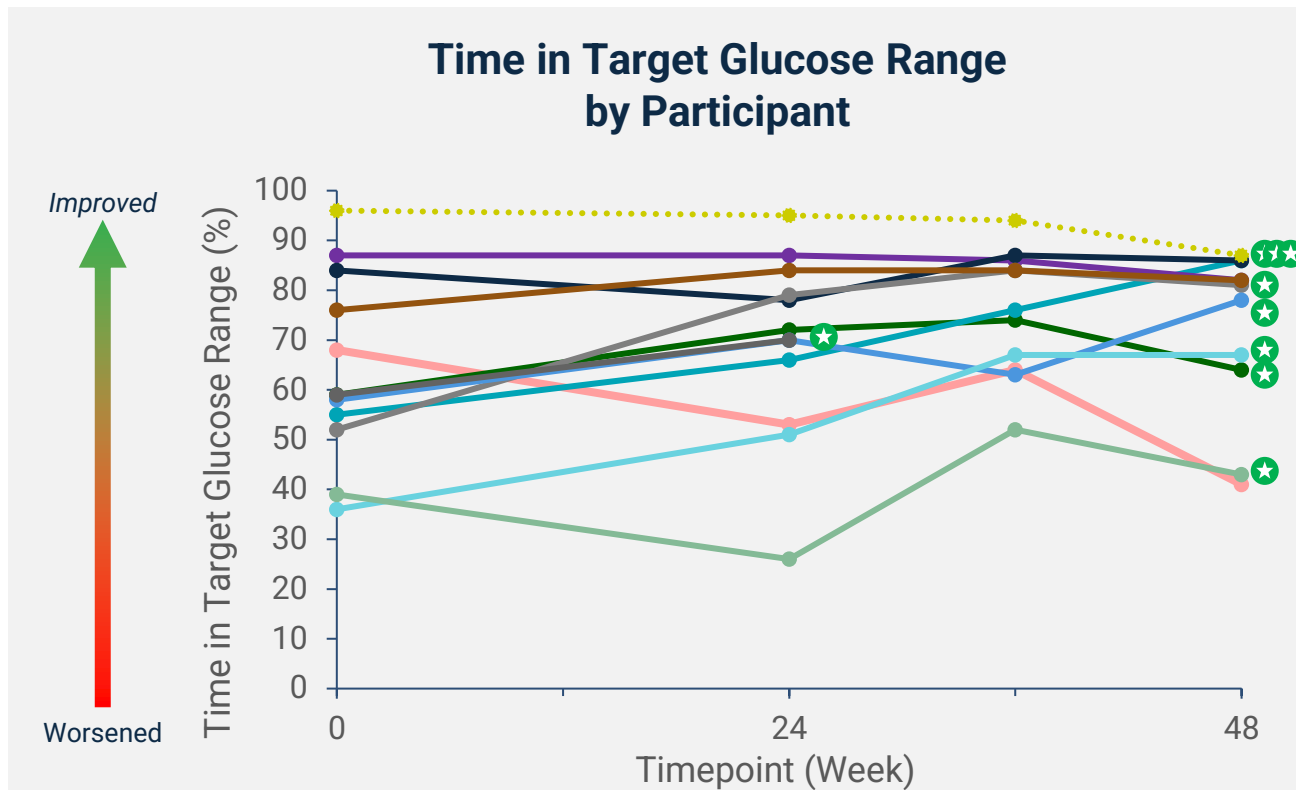


*ITT: N=12 through Week 35/36; N=11 thereafter; Per Protocol: N=11 through Week 35/36; N=10 thereafter
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Secondary Endpoint: Overall Time in Target Glucose Range*



Improved Glycemic Control as Assessed by Continuous Glucose Monitoring (CGM) Compared to Screening



★ 9 of 11 Per Protocol participants demonstrated stable or increased time in target glucose range from Screening to latest available timepoint

*Time in range was measured by continuous glucose monitoring (CGM). Good range defined as glucose recording between 70 and 180 mg/dL

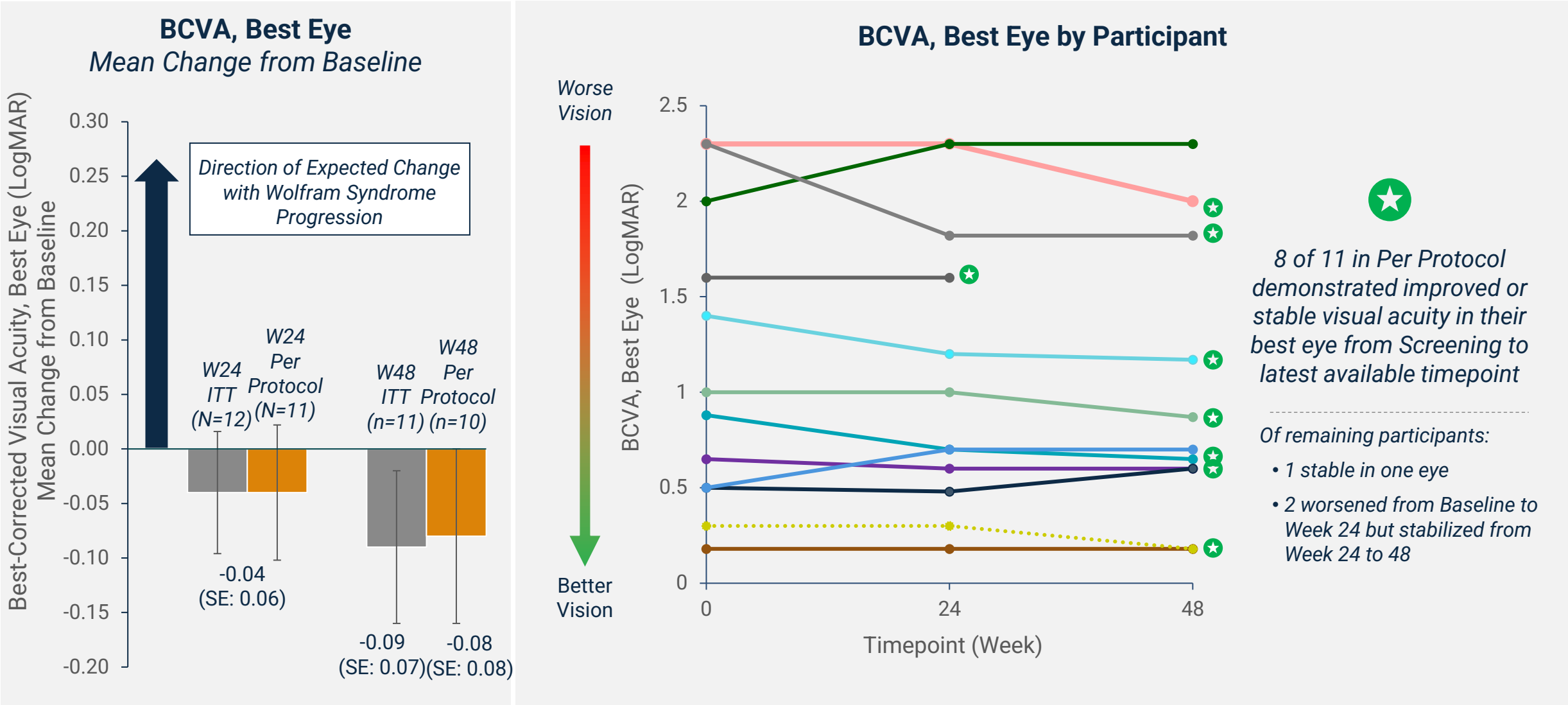
Dotted line in By Participant graph indicates the participant not included in the Per Protocol population

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Secondary Endpoint: Best Corrected Visual Acuity (BCVA)

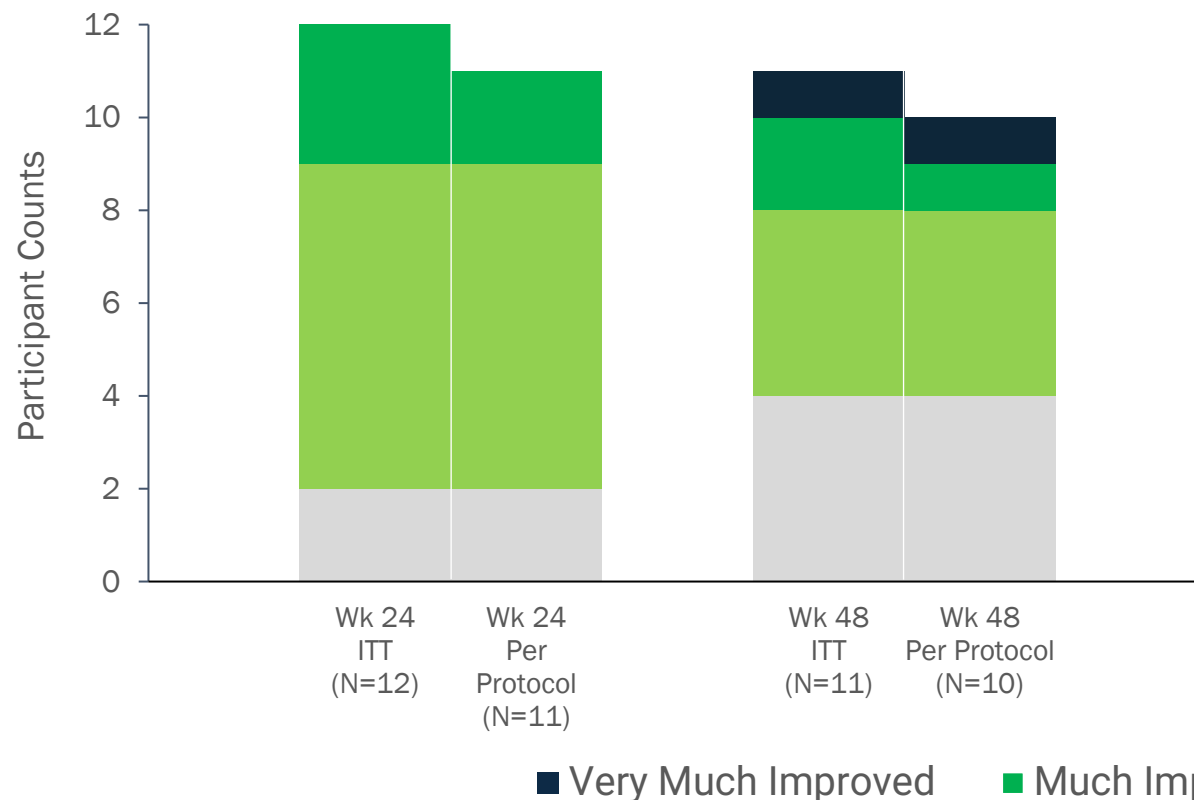


Exploratory Endpoint: PGI-C and CGI-C

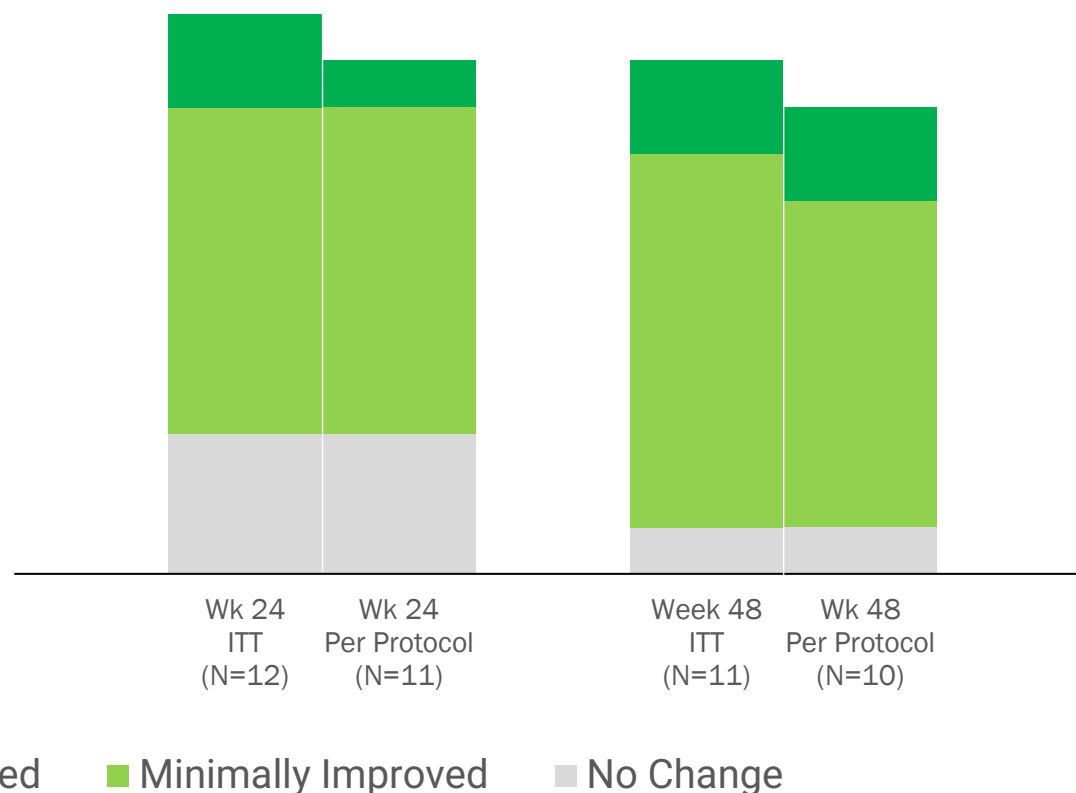
**100% of Participants Met Responder*
Criteria by Self and Clinician Assessment**

At Week 48, 6 of 10 Per Protocol participants claimed to have improved on PB&TURSO; 9 of 10 improved based on clinician report

Patient-Reported Global Impression of Change (PGI-C)
Change from Baseline



Clinician-Reported Global Impression of Change (CGI-C)
Change from Baseline



*HELIOS defines a “responder” on both scales as no change or improvement given the progressive nature of Wolfram syndrome
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Exploratory Endpoint: On-Study Qualitative Interviews

Wolfram Syndrome-Related Symptom/Complication ^a	Number Reporting Positive Change, n (%) ^b	Number Reporting Change was Important, n (%)
Insulin-Dependent Diabetes (n=10)	7 (70%)	7 (100%)
Vision problems (n=11)	7 (64%)	7 (100%)
Bladder issues, e.g., pain or incontinence (n=11)	5 (46%)	4 (80%)
Fatigue (n=6)	4 (68%)	4 (100%)
Problems swallowing (n=5)	3 (60%)	3 (100%)
Headaches/migraine (n=4) ^c	3 (75%)	3 (100%)

“And I am able to see more colors. [It is important because] I’ve always been a very artistic person, and when I was younger, art was my thing, and I’d lose myself in the art I did. And coloring was more of my thing and losing that ability because of colorblindness it completely broke my heart.”

-HELIOS Participant

“...I used to get my choking episodes...at one point I was getting them every day, which was really rough. Now I get them about once, maybe twice a week, if that...it’s [a] very important [improvement]...”

-HELIOS Participant

^an = the number of participants who reported experiencing the symptom pretrial

^bBased on the number of participants who reported experiencing the symptom pretrial

^cThe participant who reported experiencing ear pain in conjunction with headaches reported improvements in headache and accompanying ear pain.

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PB&TURSO Safety and Tolerability

- PB&TURSO was **generally well tolerated**
 - Diarrhea was the most common TEAE (58.3%); all cases were of mild severity
 - All TEAEs were graded mild or moderate
- **No new safety signals** were identified
- Nearly all participants reported ≥ 1 TEAE during the trial
 - Most did not lead to modification or interruption of PB&TURSO dosing and **none led to drug discontinuation**

Summary of Treatment Emergent Adverse Events (TEAEs)

	PB&TURSO (N=12)*
Participants with ≥ 1 TEAE— n (%)	11 (91.7%)
TEAE related to study drug** – n (%)	10 (83.0%)
Serious adverse events – n (%)	0 (0%)
Drug interrupted owing to TEAE — n (%)	3 (25.0%)
Dose reduced owing to TEAE — n (%)	3 (25.0%)
Drug discontinued owing to TEAE — n (%)	0 (0%)

*All available safety data as of January 2025 included

**Includes those with TEAEs at least possibly related to treatment; 10 possibly related, 1 probably related

Limitations

- Open-label, single-arm study
- 12 adult participants (aged ≥ 17 years)
- Clinical heterogeneity

Key Takeaways

- PB&TURSO has been shown to mitigate ER stress and mitochondrial dysfunction
- HELIOS analysis demonstrated **improvement in pancreatic function and glycemic control**, as measured by C-peptide and other markers of glucose metabolism
- **Improvements were also seen across secondary and exploratory endpoints** though the degree of benefit was variable
- Analyses once all participants have completed Week 96 will provide additional insight

Amylyx is advancing the clinical development of AMX0035 in Wolfram syndrome and, pending alignment with the FDA, planning to initiate a focused, pivotal Phase 3 trial in the **second half of 2026**



We extend our deepest gratitude to the HELIOS trial participants, their loved ones, Dr. Fumi Urano, the Washington University site team, and the entire Wolfram Syndrome community for their support of this trial.

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