



48-Week IMPACT Phase 2b Topline Data Presentation

December 2025



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Pemvidutide: Addressing Both the Cause and Consequence of Metabolic Liver Diseases

Currently available therapies often do not treat the totality of the disease, provide limited effectiveness, or have a poor tolerability profile

Pemvidutide: Balanced 1:1 glucagon/GLP-1 dual receptor agonist



Glucagon
Provides direct liver effects, including reductions in liver fat, inflammation, and fibrosis



GLP-1 receptors
Mediates metabolic effects such as appetite suppression and weight loss



Tolerability | EuPort domain contributes to favorable tolerability profile observed to date - a critical driver of prescribing practice and patient adherence

Early Effect on MASH + Tolerability Observed at 24 Weeks

24 Weeks

1

Rapid and significant reductions in liver fat and markers of inflammation, with early MASH resolution

2

Weight loss with no evidence of plateauing at 24 weeks

3

Trending improvement of fibrosis as measured by biopsy data

4

Results from key NITs showed strong evidence of clear antifibrotic activity with pemvidutide

5

Favorable tolerability profile with a low discontinuation rate

Topline Results Achieved Key Measures of Success at 48 Weeks

48 Weeks

1

Further improvements in NITs including antifibrotic activity in ELF and LSM (Fibroscan)

2

Established clear dose response with strong 1.8 mg performance observed on all evaluated parameters, including additional weight loss

3

Maintained significant positive impact on early measures of inflammatory markers associated with fibrosis improvement and MASH resolution

4

Maintained low discontinuation rate and generally favorable tolerability profile

IMPACT Phase 2b MASH Trial Design

Screening/Randomization

Key Eligibility Criteria

- MASH (F2/F3)
- LFC⁽¹⁾ ≥ 8%
- BMI ≥ 27.0 kg/m²
- HbA1c ≤ 9.5%

Key Endpoints

Primary

MASH resolution or fibrosis improvement⁽²⁾ at Week 24

Secondary

- MASH resolution and fibrosis improvement
- Non-invasive tests (NITs)
- Weight Loss

Placebo (PBO) weekly

1.2 mg weekly

1.8 mg weekly

N = 212 subjects randomized 2:1:2
No dose titration

Week 24

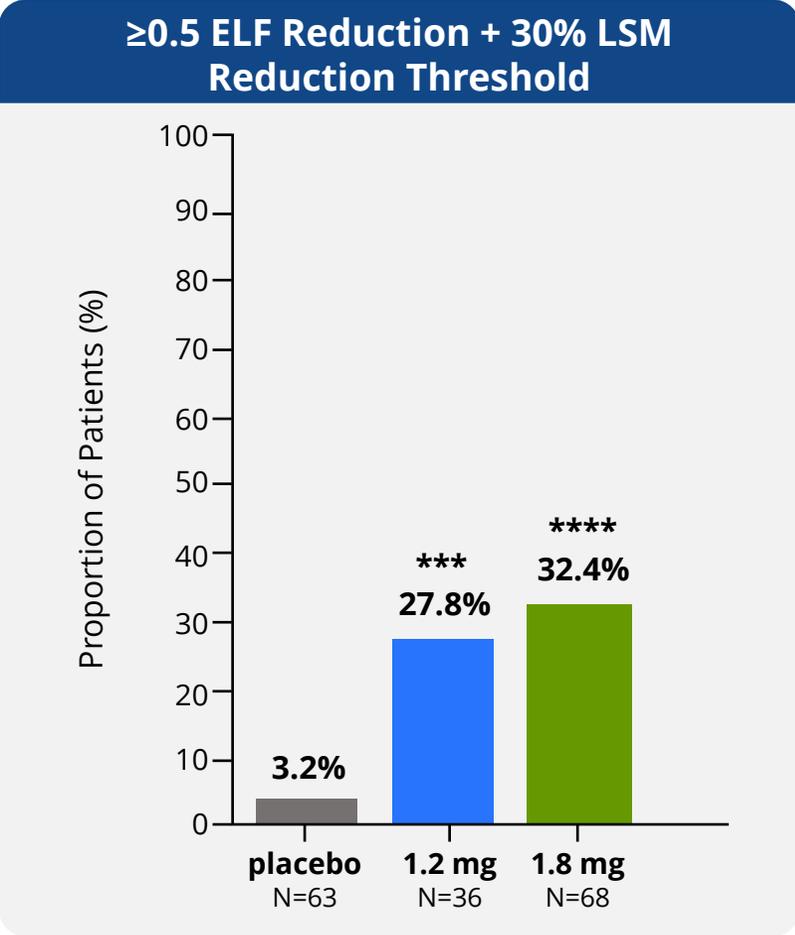
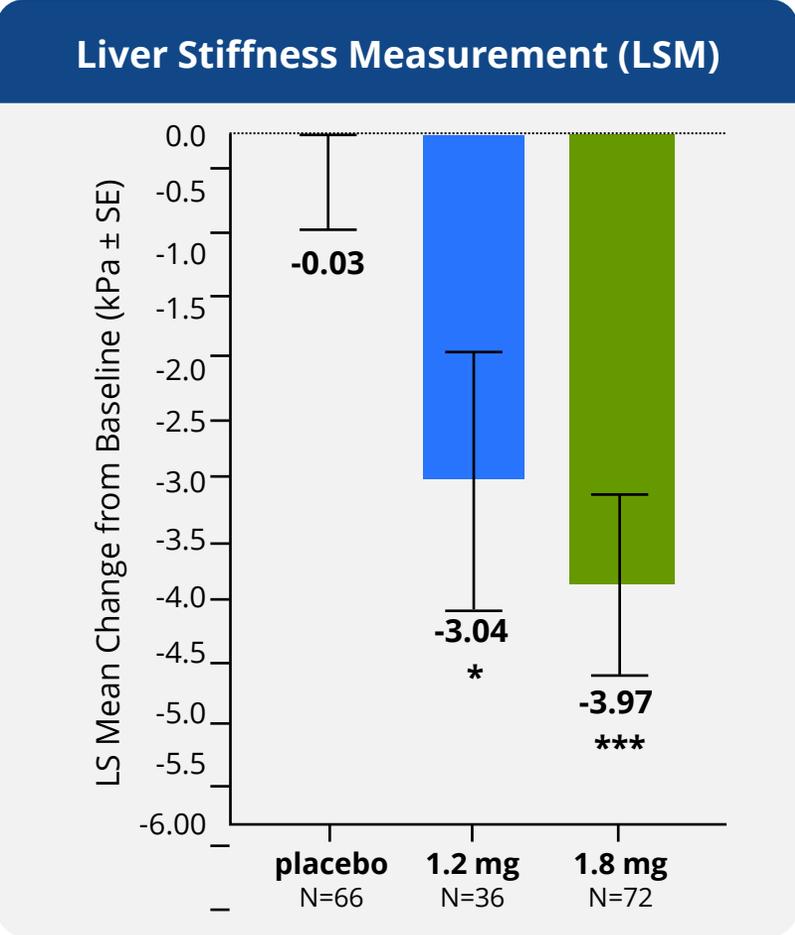
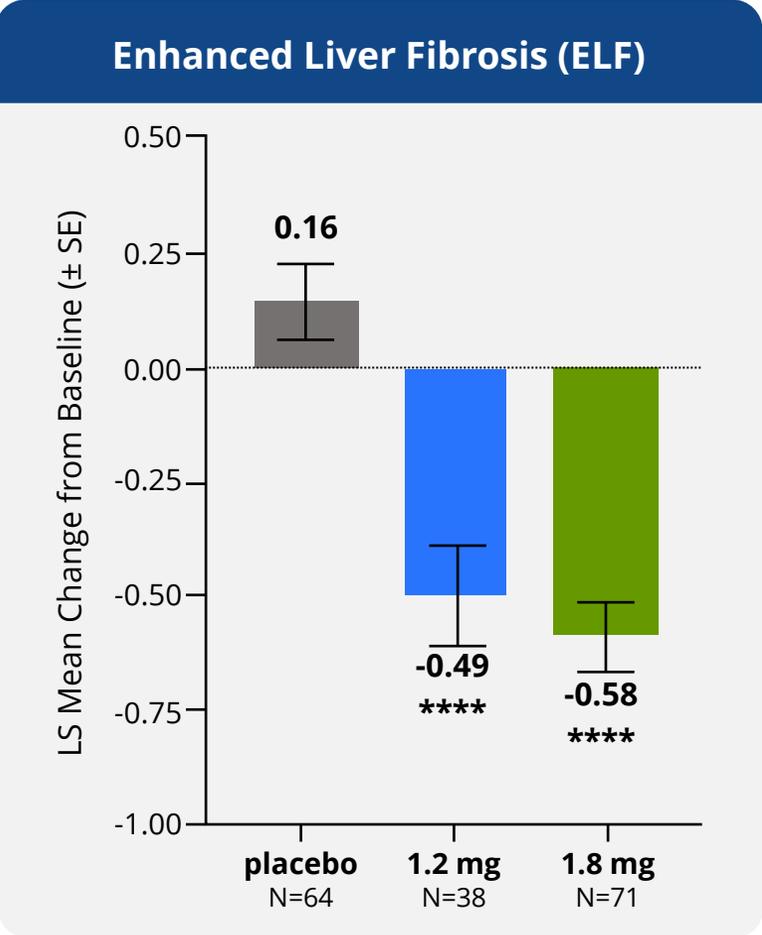
Liver Biopsy
NITs
Weight Loss

Week 48

NITs
Weight Loss

1. Liver fat content. 2. MASH Resolution without worsening of fibrosis or Fibrosis Improvement without worsening of MASH.

Substantial Improvements in Non-invasive Tests of Markers of Fibrosis at 48 Weeks, Dose Response Favors 1.8 mg

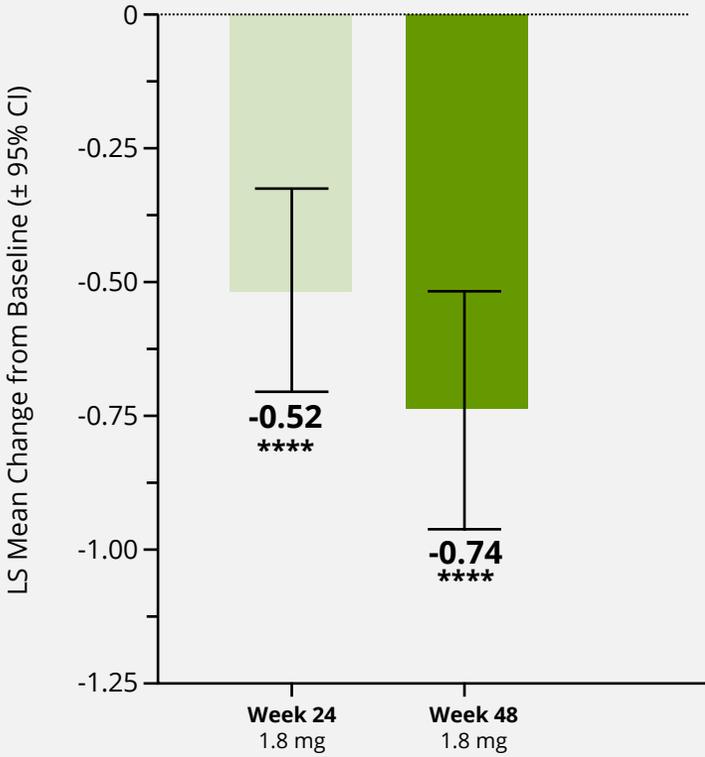


* p < 0.05 | *** p < 0.001 | **** p < 0.0001 vs. placebo (ANCOVA)

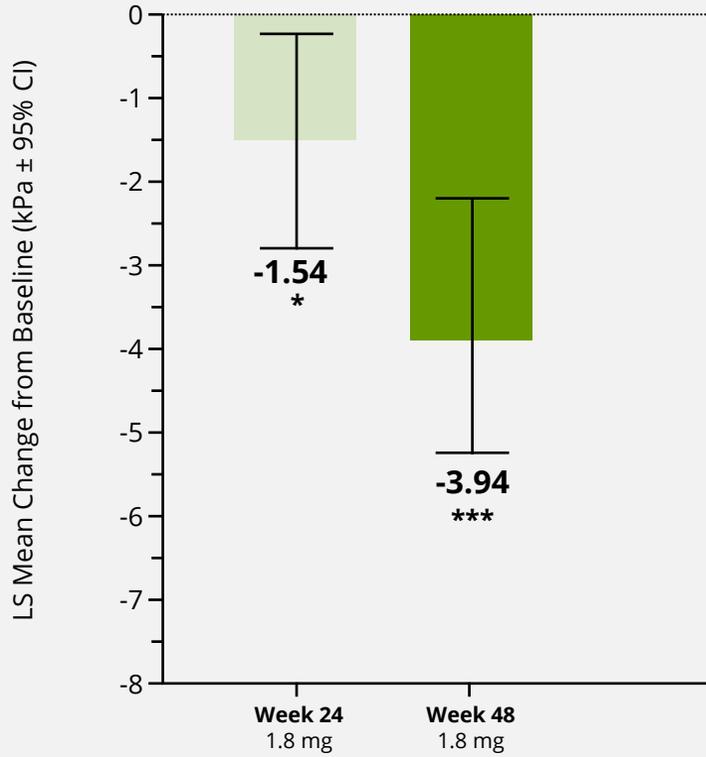
*** p < 0.001 | **** p < 0.0001 vs. placebo (CMH)

Improvements in Primary Non-invasive Markers of Fibrosis from 24 to 48 Weeks with 1.8 mg, Supporting Phase 3 Development

Enhanced Liver Fibrosis (ELF) Placebo-Adjusted



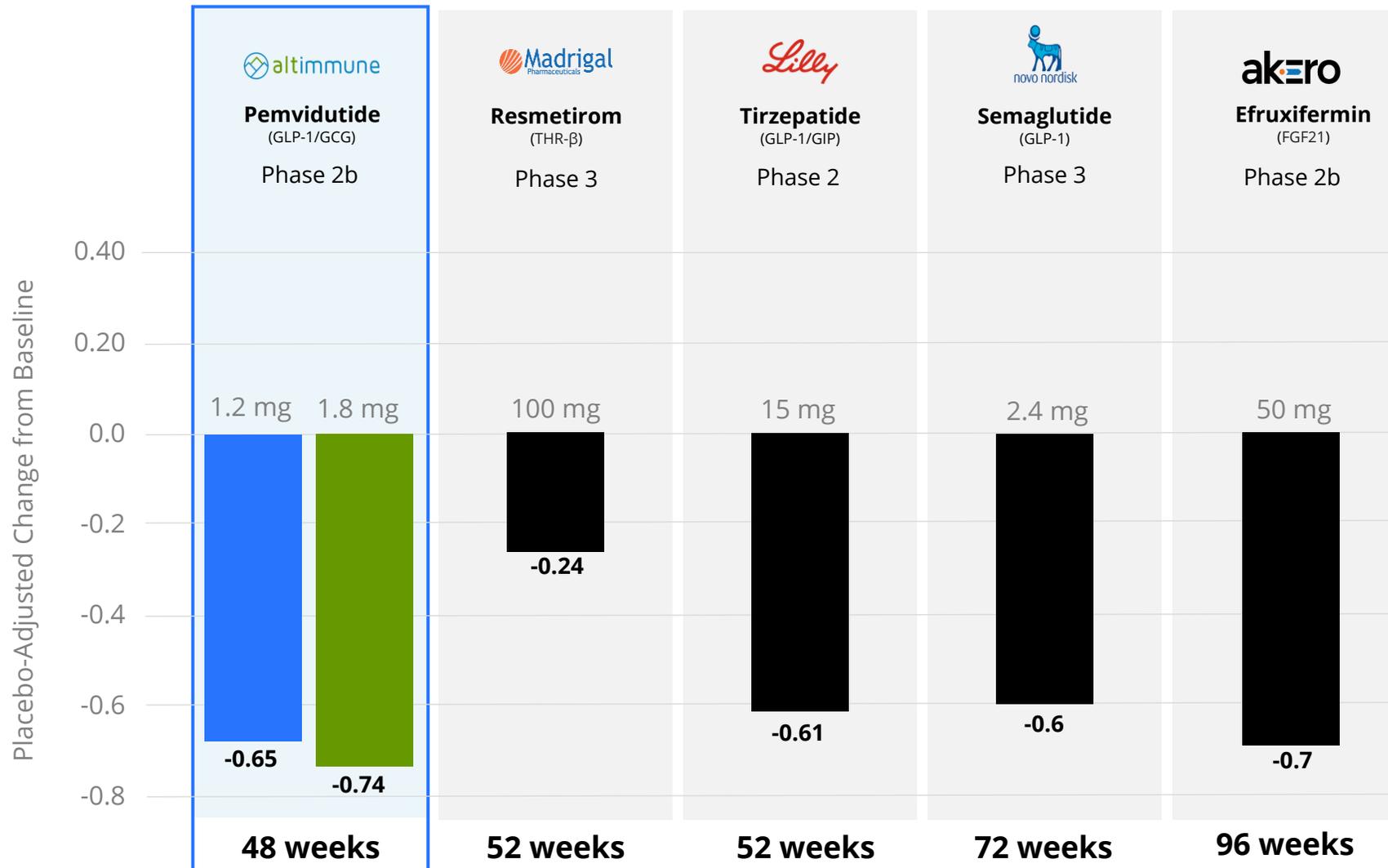
Liver Stiffness Measurement (LSM) Placebo-Adjusted



* $p < 0.05$ | *** $p < 0.001$ | **** $p < 0.0001$ vs. placebo (ANCOVA)

Enhanced Liver Fibrosis (ELF) Response

Placebo adjusted based upon published data

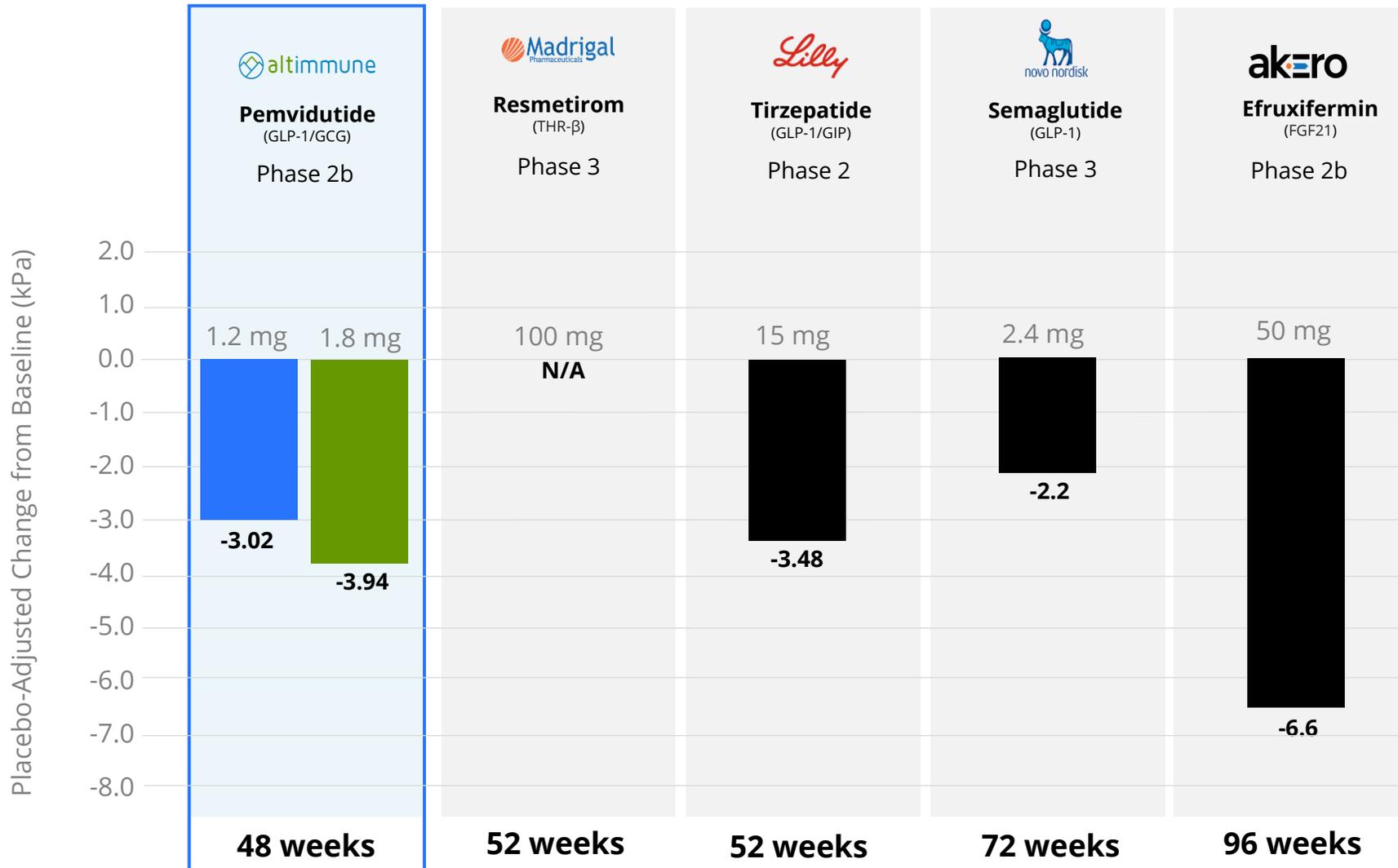


ELF was evaluated as a secondary endpoint in the trials shown.

No head-to-head studies of pemvidutide to other MASH products or product candidates have been conducted; the data regarding other MASH products and product candidates is based on published data. Because of differences in patient populations, study designs, and numerous other factors, cross-trial comparisons must be interpreted with caution and no conclusions can be drawn. Different statistical analyses may have been used by the respective companies to cover any changes in the analyses. Actual results may materially differ.

LSM (Fibroscan) Response

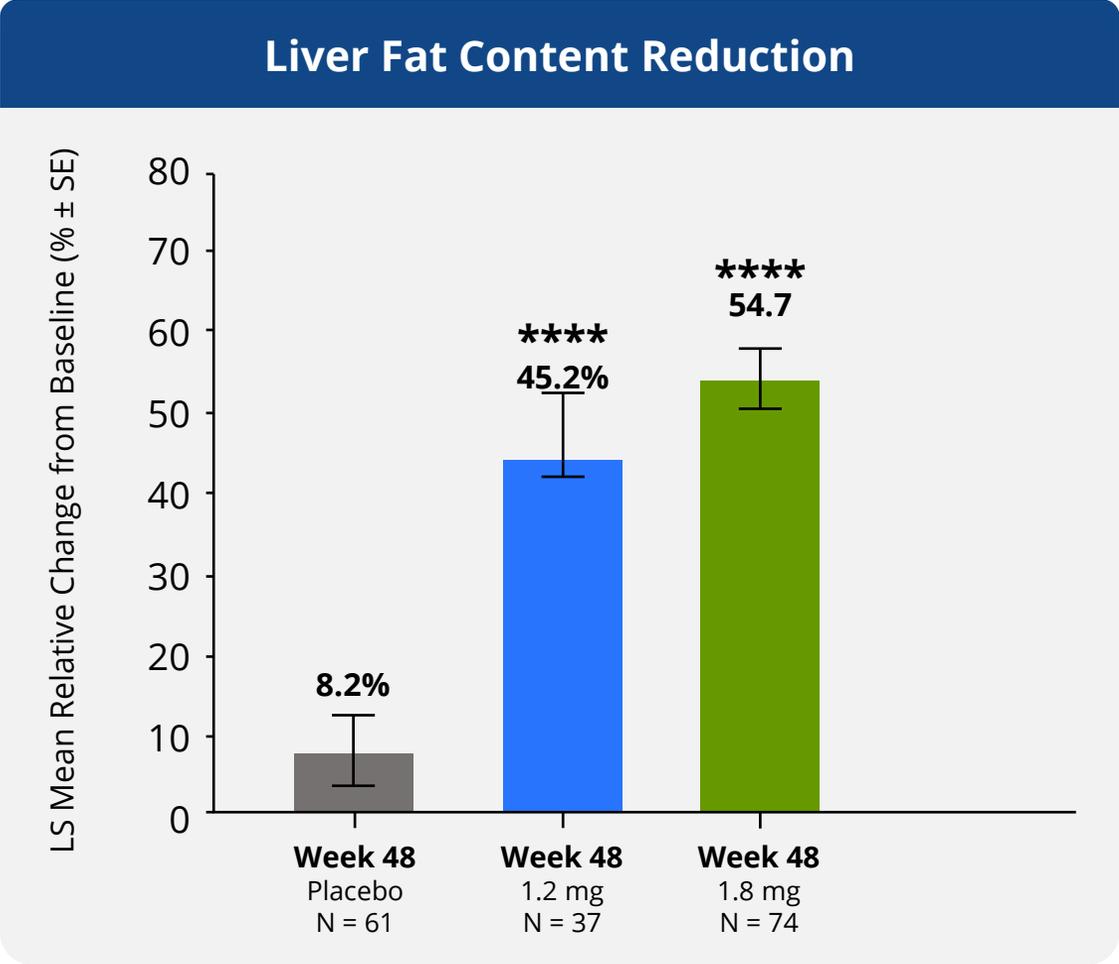
Placebo adjusted based upon published data



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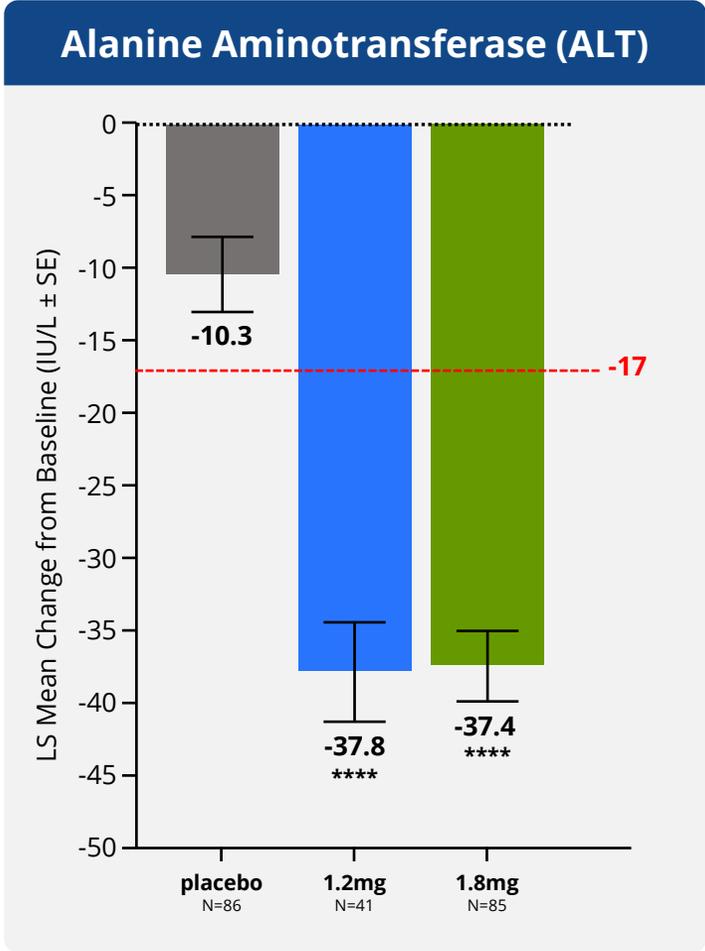
1.8 mg Dose Maintained >50% Reduction in Liver Fat Over 48 Weeks



**** $p < 0.0001$ vs. placebo (ANCOVA)

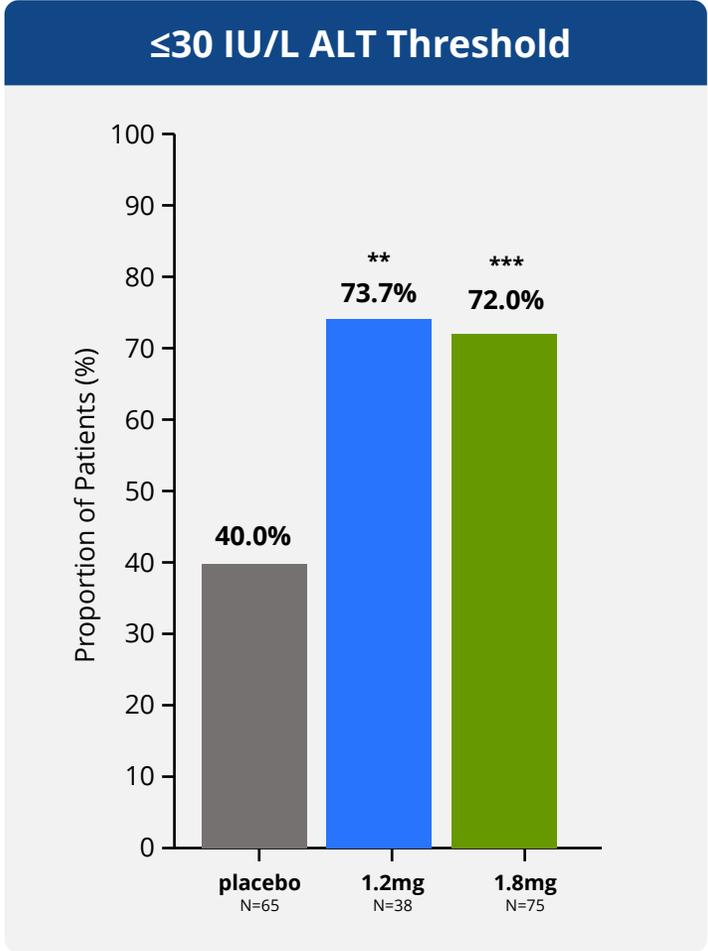
- » Similar levels of liver fat reduction were observed as early as 24-weeks
- » Liver fat content is a key driver of MASH and fibrosis
- » A $\geq 30\%$ reduction in liver fat content is strongly associated with MASH resolution

Significant Reductions in Alanine Aminotransferase (ALT)



**** p < 0.0001 vs. placebo (MMRM)

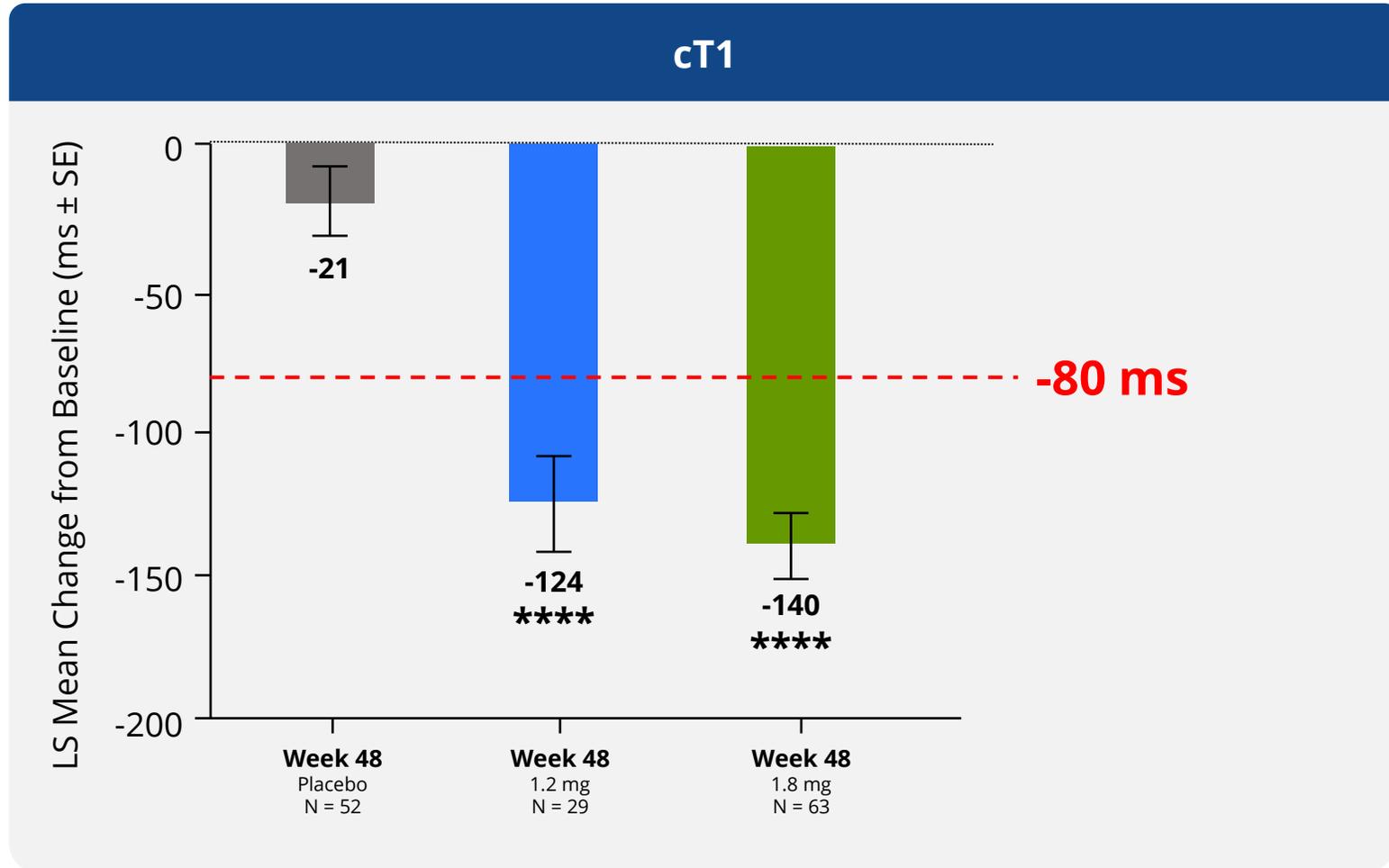
- » ALT is a measure of hepatic inflammation and disease
- » >17 IU/L reduction is strongly associated with MASH resolution
- » Pemvidutide demonstrated return to normal levels of ALT (≤ 30 IU/L) for a majority of patients



** p < 0.005 | *** p < 0.001 vs. placebo (CMH)

Significant Reductions in Corrected T1 (cT1)

Reduction of ≥ 80 ms is associated with an improvement in histology in MASH[†]



- » cT1 is a non-invasive marker of hepatic inflammation
- » 80 ms reduction in cT1 is associated with 2-point reduction in NAS^{††}
- » cT1 data are consistent with maintenance of hepatic anti-inflammatory activity

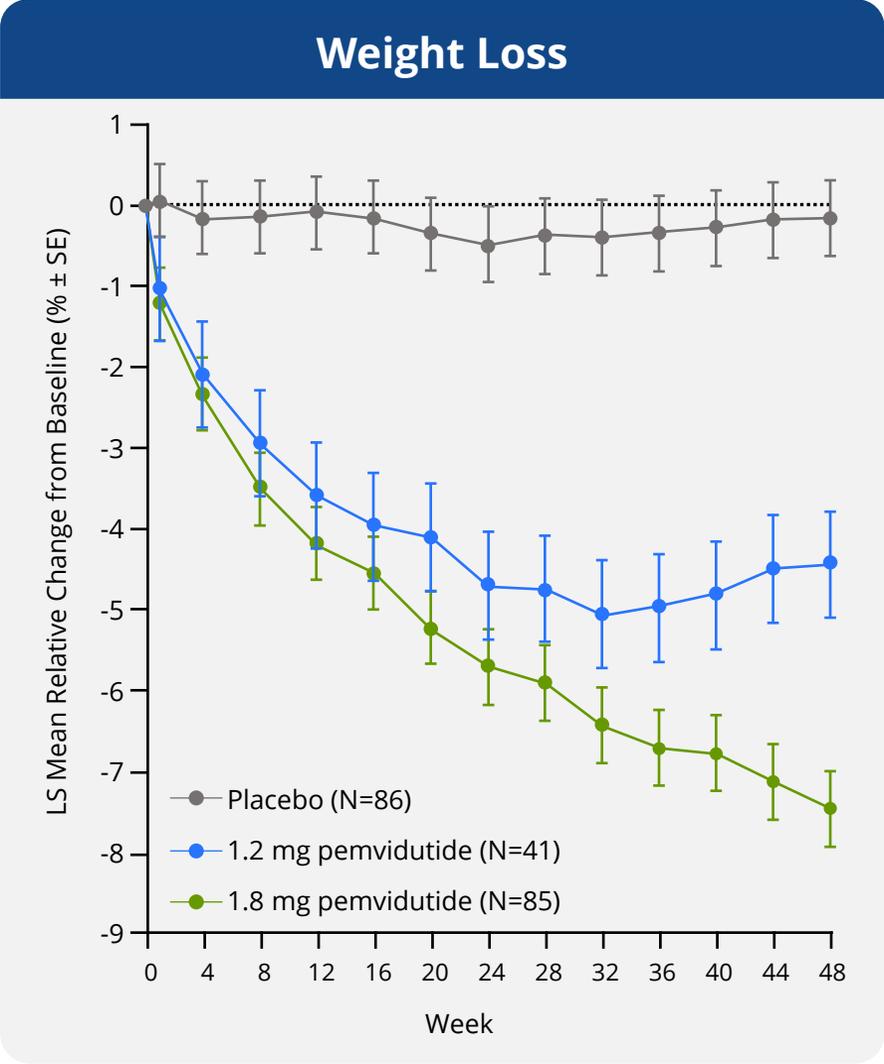
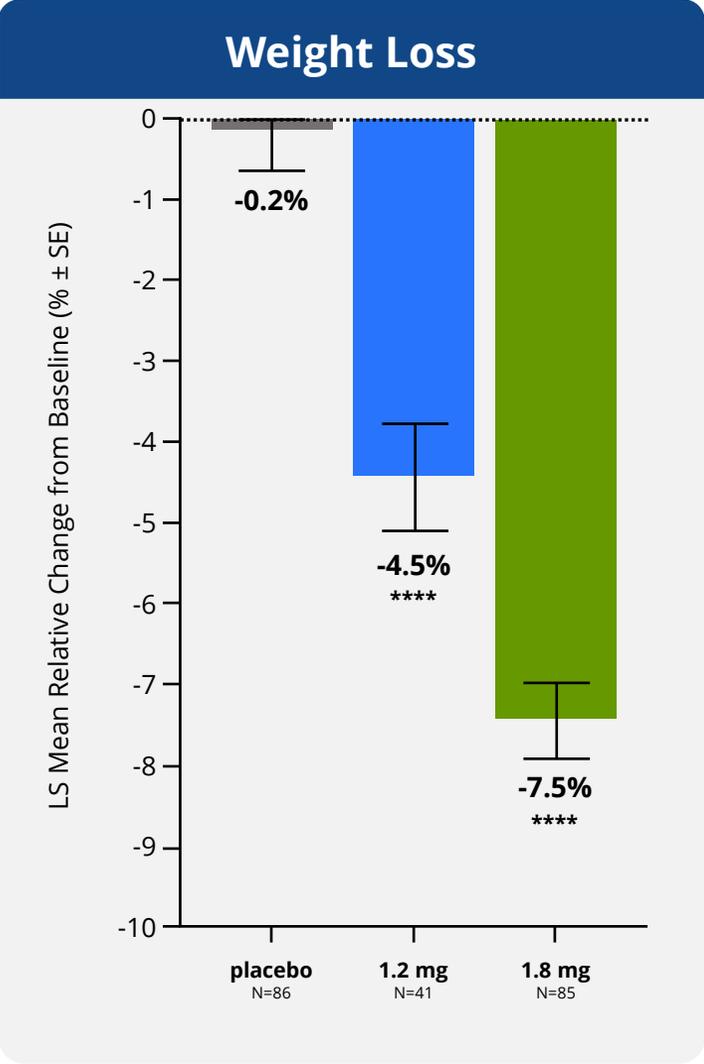
**** $p < 0.0001$ vs. placebo (ANCOVA)

[†] Alkhouri et al. *Journal of Hepatology*; 2025; 82(3), 438-445.

^{††} Dennis et al. *Front Endocrinol* 2020;11:575843.

NAS = Non-alcoholic fatty liver disease (NAFLD) activity score

Significant and Continuing Weight Loss for 1.8 mg at 48 Weeks



- » Weight loss has been shown to be associated with MASH improvement[†]
- » Weight loss of 7.5% at week 48 with no plateauing in 1.8 mg dose
- » Opportunity to potentially achieve greater weight loss with 2.4 mg dose in Phase 3

[†]Vilar-Gomez et al. *Gastroenterology*. 2015;149(2):367-78

**** $p < 0.0001$ vs. placebo (MMRM)



Safety Profile Maintained at 48 Weeks

	Placebo (N=86)	1.2 mg (N=41)	1.8 mg (N=85)
Serious AEs	5 (5.8%)	1 (2.4%)	8 (9.4%)
Serious AEs related to study med	0 (0.0%)	0 (0.0%)	0 (0.0%)
Severe AEs	2 (2.3%)	1 (2.4%)	8 (9.4%)
Severe AEs related to study med	0 (0.0%)	0 (0.0%)	0 (0.0%)
AEs of Special Interest related to study med	0 (0.0%)	0 (0.0%)	0 (0.0%)



Majority of AEs mild to moderate in severity



No heart rate increases or imbalances in cardiac AEs versus placebo



Maintenance of HbA1c regardless of diabetes status

Favorable Tolerability at 48 Weeks

Adverse Events	Placebo (N=86)	1.2 mg (N=41)	1.8 mg (N=85)
Nausea	15 (17.4%)	9 (22.0%)	35 (41.2%)
Vomiting	2 (2.3%)	3 (7.3%)	10 (11.8%)
Diarrhea	7 (8.1%)	5 (12.2%)	19 (22.4%)
Constipation	10 (11.6%)	5 (12.2%)	15 (17.6%)
AEs leading to treatment discontinuation	3 (3.5%)	0 (0.0%)	1 (1.2%)



Majority of GI AEs were mild to moderate in severity and predominantly occurred within the first 8 weeks



Approximately 1% of subjects receiving pemvidutide discontinued treatment due to AEs

Data are presented as n (%)

End-of-Phase 2 Meeting with FDA Key Takeaways + Implications for Phase 3

- » Productive meeting held with final minutes expected in January
- » Aligned with FDA on pathway to move forward to registrational Phase 3 trial in moderate to advanced fibrosis with biopsy driven endpoints
- » Agency is open to incorporation of AIM-MASH AI Assist, first FDA-qualified AI pathology tool for MASH clinical trials
- » Altimmune intends to evaluate multiple doses, including 2.4 mg, in Phase 3 trial
- » Company will be seeking scientific advice from European regulators, which will be considered when finalizing Phase 3 protocol

Strong Clinical Execution and Future Catalysts

2025

- ✓ **MASH:** IMPACT Phase 2b 24- and 48-Week data
- ✓ **MASH:** End-of-Phase 2 meeting
- ✓ **MASH:** Preparing for Phase 3 trial
- ✓ **AUD:** RECLAIM Phase 2 trial enrollment complete
- ✓ **ALD:** RESTORE Phase 2 trial enrolling

2026

- + **MASH:** Phase 3 trial initiation
- + **AUD:** RECLAIM topline data
- + **ALD:** RESTORE enrollment completion

2027

- + **MASH:** Phase 3 trial execution ongoing
- + **AUD:** Phase 3 opportunity
- + **ALD:** RESTORE trial completion

Summary



IMPACT Phase 2b 48-week data achieved key measures of success



Data enhance confidence for pemvidutide, with competitive profile supported by 48-weeks data



Aligned with FDA on path to Phase 3 in MASH*



Series of upcoming catalysts 2026-2028



Strengthened executive team with the right expertise to drive successful late-stage programs and create value for Altimune

Thank you