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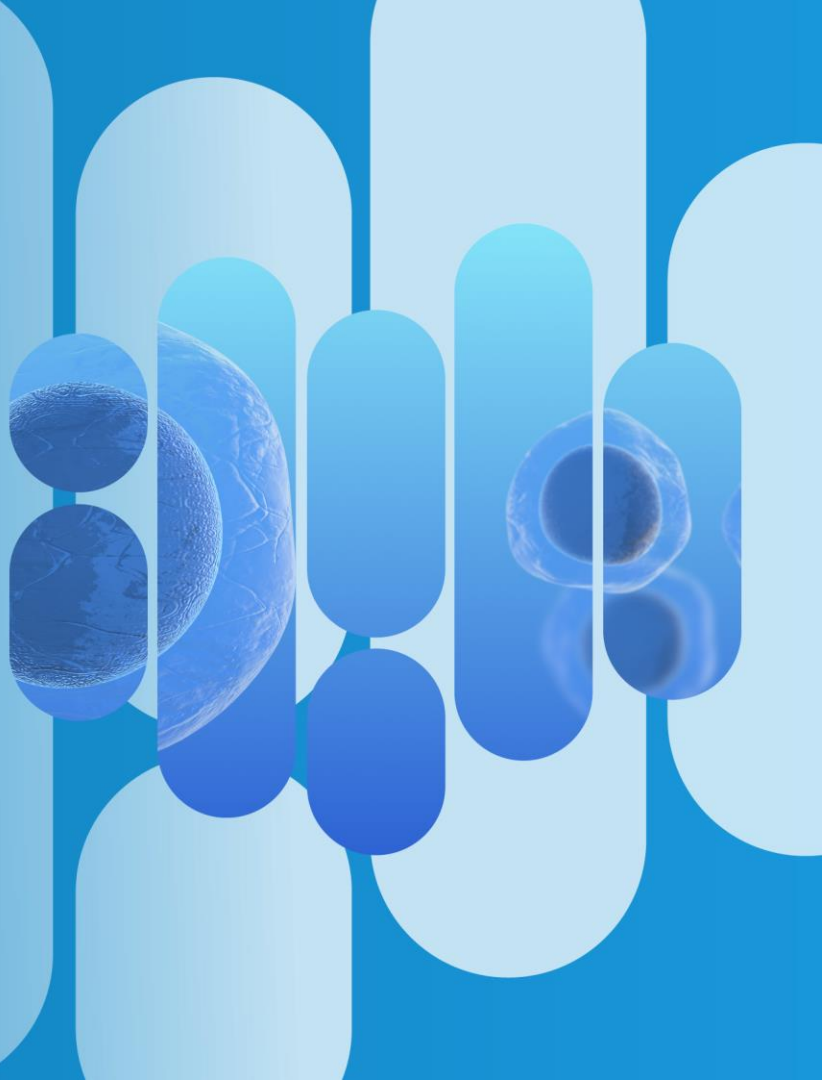
Powerful Science
Meaningful Medicines
Changing Lives

Nasdaq: ETNB

May 2023



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This presentation contains “forward-looking statements” within the meaning of the federal securities laws, which statements are subject to substantial risks and uncertainties and are based on estimates and assumptions. Other than statements of historical facts, all statements included in this presentation are forward-looking statements, including statements concerning our plans, objectives, goals, strategies, future events, plans or intentions relating to product candidates, potential market opportunities, estimates of market size, estimates of market growth, the potential clinical benefit, effect on histology and safety and tolerability profile of pegozafermin (formerly BIO89-100), the clinical potential of pegozafermin, potential indications for pegozafermin, the association of clinical data with potential clinical benefit in other indications, the anticipated timing, design, endpoints, and conduct of our ongoing clinical trials for pegozafermin, the timing of anticipated milestones, the timing of regulatory meetings, the timing and likelihood of success, plans and objectives of management for future operations and future results of anticipated product development efforts and our liquidity and capital resources, including our cash position. In some cases, you can identify forward-looking statements by terms such as “may,” “might,” “will,” “objective,” “intend,” “should,” “could,” “can,” “would,” “expect,” “believe,” “design,” “estimate,” “predict,” “potential,” “plan” or the negative of these terms, and similar expressions intended to identify forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that could cause our actual results to differ materially from the forward-looking statements expressed or implied in this presentation including those described more fully our most recent Form 10-K and Form 10-Q under the caption “Risk Factors” and elsewhere in such report and in other subsequent disclosure documents filed with the SEC.

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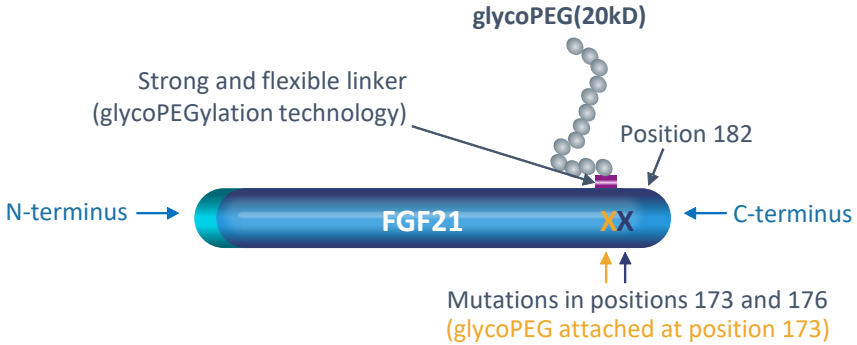
We obtained the industry, market and competitive position data used throughout this presentation from our own internal estimates and research, as well as from industry and general publications, and research, surveys and studies conducted by third parties. Internal estimates are derived from publicly available information released by industry analysts and third-party sources, our internal research and our industry experience, and are based on assumptions made by us based on such data and our knowledge of the industry and market, which we believe to be reasonable. In addition, while we believe the industry, market and competitive position data included in this presentation is reliable and based on reasonable assumptions, we have not independently verified any third-party information, and all such data involve risks and uncertainties and are subject to change based on various factors.

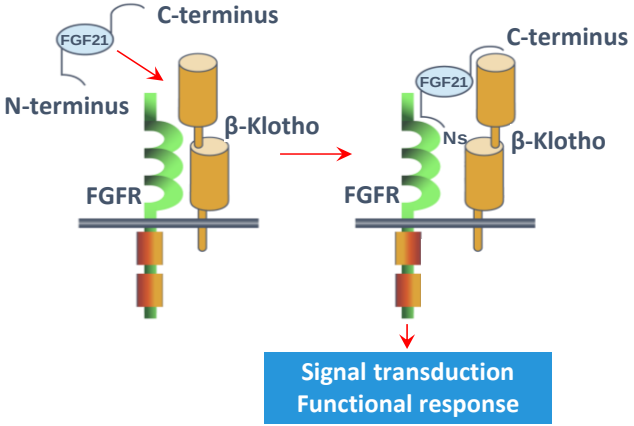
Corporate Highlights

- Late-stage clinical development company entering Phase 3 in NASH and SHTG
- Pegozafermin (FGF21 analog) has demonstrated differentiation within class and category and has the potential to be transformational for patients
- Strong balance sheet ($480.9M* in cash, cash equivalents and short-term investments)
- Highly experienced team with track record of execution

* as of March 31, 2023

Pegozafermin is an FGF21 Analog Optimally Engineered to Balance Efficacy and Long Dosing Interval





- Proprietary glycoPEGylation technology commercially validated with approved products
- Increases half-life of native FGF21 (<2 hours) to 55-100 hours based on single ascending dose study
- Low nanomolar potency against FGF receptors 1c, 2c, 3c, similar to native FGF21
- Composition of Matter patent expiring in 2038

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Opportunity in NASH

Pegozafermin – Potential to Address an Unmet Need for Effective NASH Treatments as Demonstrated in the Phase 2b ENLIVEN Trial

REVERSE LIVER FIBROSIS

IMPROVE LIVER INFLAMMATION

REDUCE LIVER FAT

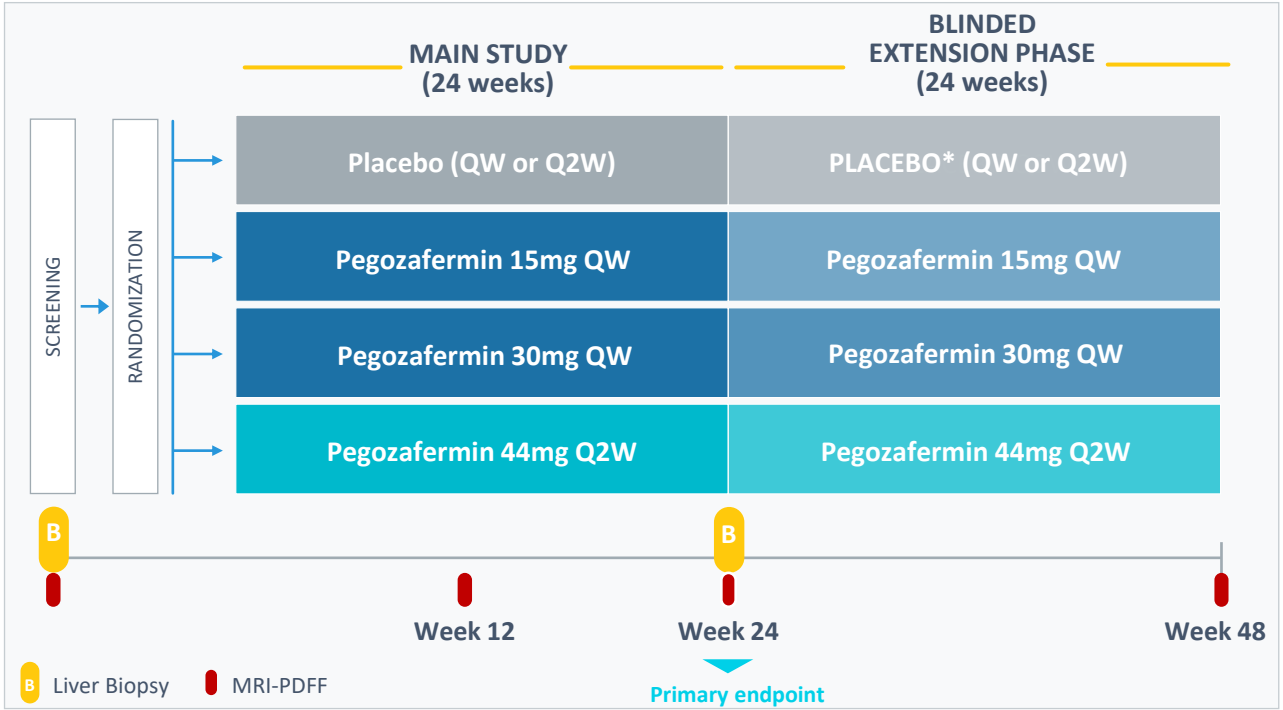
IMPROVE METABOLIC PROFILE

CONVENIENT DOSING

FAVORABLE **TOLERABILITY**

ENLIVEN Trial Design

Weekly (QW) and Every-Two-Week (Q2W) Dosing



PRIMARY ANALYSIS POPULATION

- F2-F3 NASH; NAS ≥4

PRIMARY ENDPOINTS

- ≥1-stage fibrosis improvement with no worsening of NASH[1]
- NASH resolution with no worsening of fibrosis[2]

KEY SECONDARY EFFICACY ENDPOINTS

- ≥2-point change in NAS with no worsening of fibrosis
- Non-invasive liver markers (liver fat, liver injury, fibrosis markers)

[1]Improvement in liver fibrosis by ≥1 stage and no worsening of steatohepatitis defined as no increase in NAS for ballooning, inflammation, or steatosis (FDA draft guidance).
[2]Resolution of steatohepatitis is defined as absent fatty liver disease or isolated or simple steatosis without steatohepatitis and a NAS score of 0-1 for inflammation, 0 for ballooning and any value for steatosis (FDA draft guidance).
*Some placebo patients were re-randomized in the extension phase to receive pegozafermin.
NAS, NAFLD Activity Score; MRI-PDFF, Magnetic resonance imaging-estimated proton density fat fraction; QW: Every week; Q2W: Every 2 weeks

Potential Challenges with Common Biopsy Reading Approaches

Single pathologist

- Wholly dependent on idiosyncrasies of that reader
- FDA strongly encourages sponsors to use multiple readers and consensus

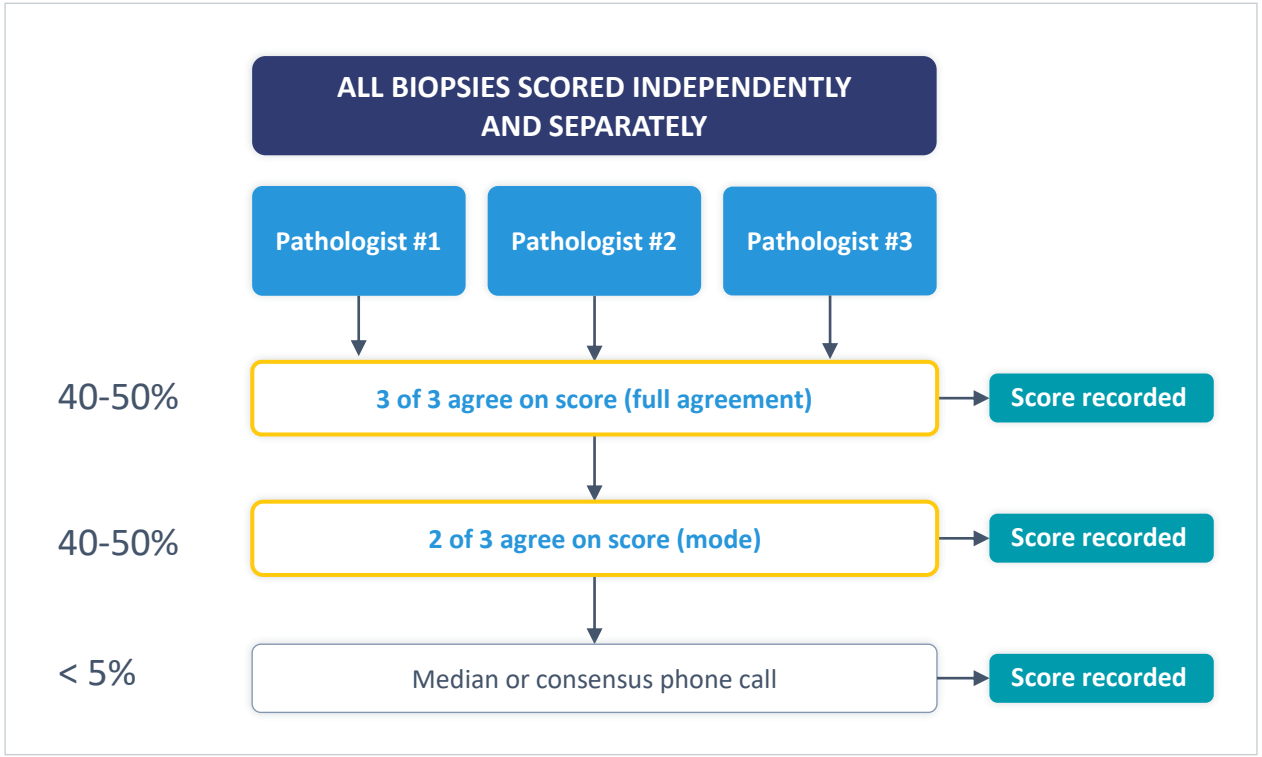
Two pathologists with an adjudicator

- >50% of scores will be different between the two pathologists
- The adjudicator then acts like a single pathologist to break the tie

Two pathologists with an alignment call

- >50% of scores will be different between the two pathologists
- Alignment call introduces social pressures to reach agreement and often the senior voice prevails
  - Confirmed by pathologists involved in NASH alignment calls
- Typically the alignment call defaults to the single pathologist

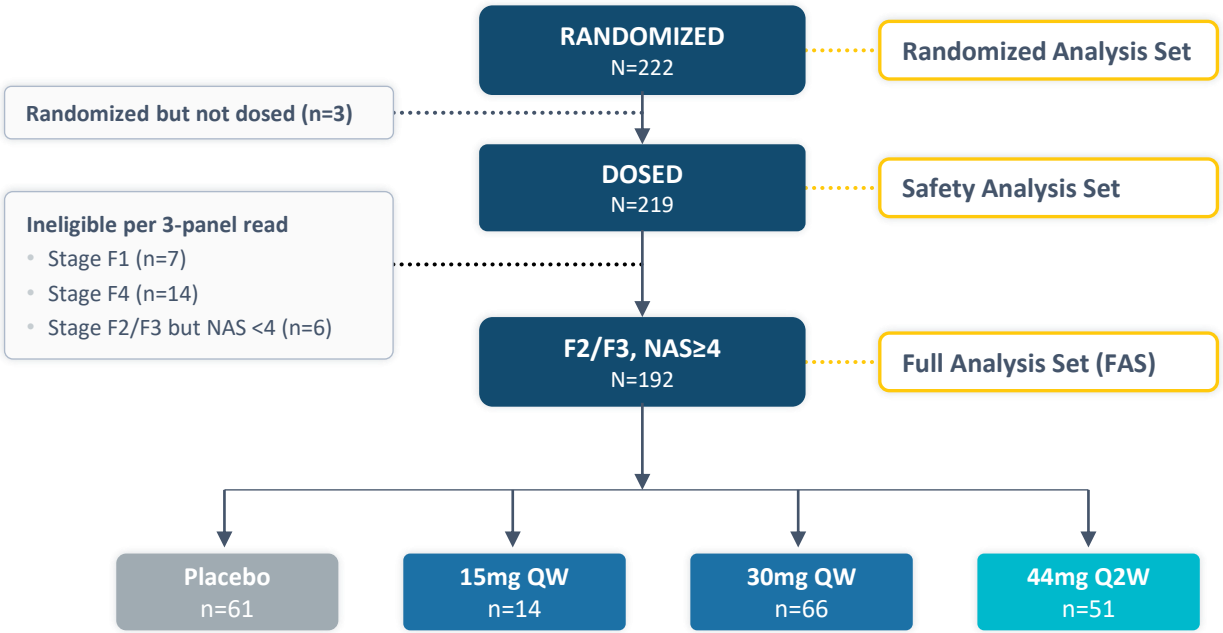
Objective Biopsy Reading Method Designed to Identify Drug Effect



- Pathologists underwent protocol-specific harmonization training before and during trial
- Pathologists were blinded to subject, treatment and sequence
- >99% of final scores determined by algorithm, which was established a priori, rather than resolving disagreements by inter-reader discussion

Designed to reduce impact of individual reader bias and inter-reader variability

Patient Disposition and Analysis Sets



Analysis Sets were prospectively defined
Completer Analysis Set = FAS subjects with biopsies at both baseline and Week 24 (n=164).
MRI-PDFF Analysis Set = all subjects in FAS with baseline and at least one post-baseline MRI-PDFF assessment (n=181).

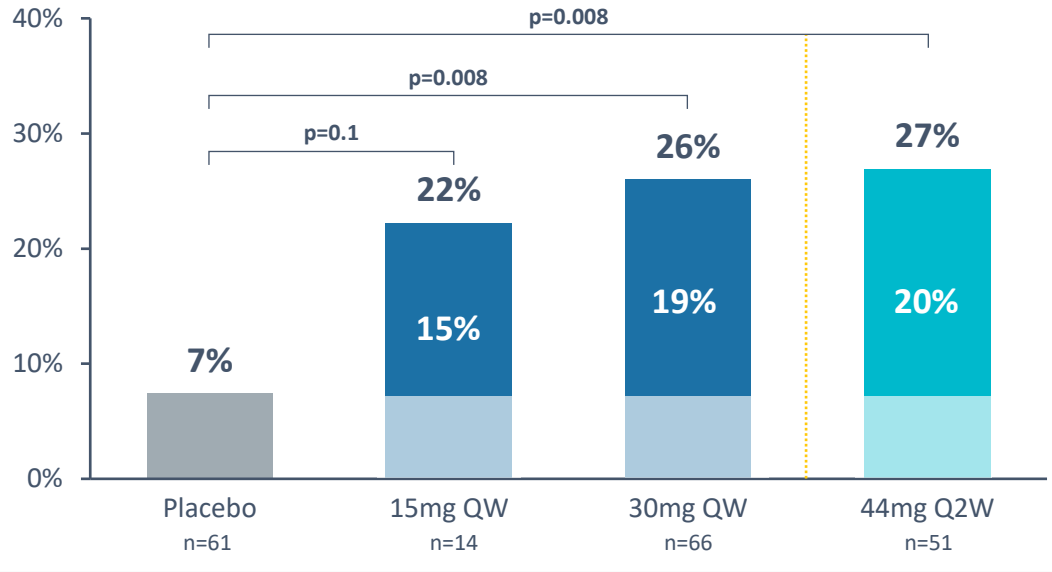
Baseline Characteristics Well Balanced Across Dose Groups

Parameter Mean or %	Placebo (n=71)	15mg QW (n=21)	30mg QW (n=73)	44mg Q2W (n=57)	Total (n=222)
Age (years)	56	55	55	55	**56**
Female	55%	43%	69%	65%	**61%**
BMI (kg/m^2)	38	38	35	36	**37**
Type 2 Diabetes	69%	86%	62%	61%	**66%**
Fibrosis Stage (% F3)	66%	43%	64%	53%	**60%**
NAFLD Activity Score	5.0	4.8	5.3	5.2	**5.1**
Liver Fat Content (MRI-PDFF)	16.7%	15.8%	16.7%	15.8%	**16.4%**
Liver Stiffness (VCTE, kPa)	14.1	11.2	12.5	13.2	**13.0**
PRO-C3 (ng/mL)	50	62	54	52	**53**
ALT (U/L)	50	61	60	56	**56**
AST (U/L)	41	48	47	42	**44**
HbA1c, overall population (%)	6.6	7.0	6.6	6.7	**6.7**
Triglycerides (mg/dL)	170	186	175	165	**172**

Baseline characteristics were consistent in full analysis set (n=192) and the safety set (n=222)

Source: Randomized Analysis Set.
ALT, alanine aminotransferase; AST, aspartate aminotransferase; BMI, body mass index; NAFLD, nonalcoholic fatty liver disease; PRO-C3, N-terminal type III collagen propeptide; VCTE, Vibration-controlled transient elastography.

Pegozafermin Demonstrated Statistical Significance on Fibrosis Improvement with Weekly and Every-Two-Week Dosing



- Results were statistically significant for both doses using an ITT analysis (imputes patients with missing biopsies as non-responders) and completers analysis

Relative risk is calculated by dividing drug response by placebo response

*Relative risk presented is calculated by dividing the drug response by placebo response. Relative risk calculated using statistical methods show similar results.
Source: Full Analysis Set; multiple imputation analysis via Cochran-Mantel-Haenszel (CMH) test stratified by type 2 diabetes mellitus (T2DM) status (yes vs. no) and fibrosis stage (F2 vs. F3).

Clinical Data in Pre-Cirrhotic Patients

≥1 Stage Fibrosis Improvement with No Worsening of NASH (placebo-adjusted)

	89bio	Intercept	Madrigal Pharmaceuticals	inventiva	novo nordisk	akero
	Pegozafermin	**Ocaliva**	**Resmetirom[2]**	**Lanifibranor**	**Semaglutide**	**Efruxifermin**
	Phase 2b | 24 weeks	Phase 3 | 72 weeks	Phase 3 | 52 weeks	Phase 2b | 24 weeks	Phase 2 | 72 weeks	Phase 2b | 24 weeks
	Multiple Imputation[1]					Completers Analysis
Drug response as multiple of placebo response*	**3.5**	**3.6**	2.3	1.7	1.9	1.1	1.6	1.3	2.0	2.0
	19%	20%	13%	10%	12%	3%	17%	10%	19%	21%
	p=0.008	p=0.008	p<0.001	p=0.0002	p<0.0001	p=ns	p=0.04	p=ns	p<0.05	p<0.05
	30mg QW (n=66)	44mg Q2W (n=51)	25mg (n=308)	80mg (n=316)	100mg (n=321)	800mg (n=63)	1200mg (n=69)	0.4mg QD (n=56)	28mg (n=38)	50mg (n=34)

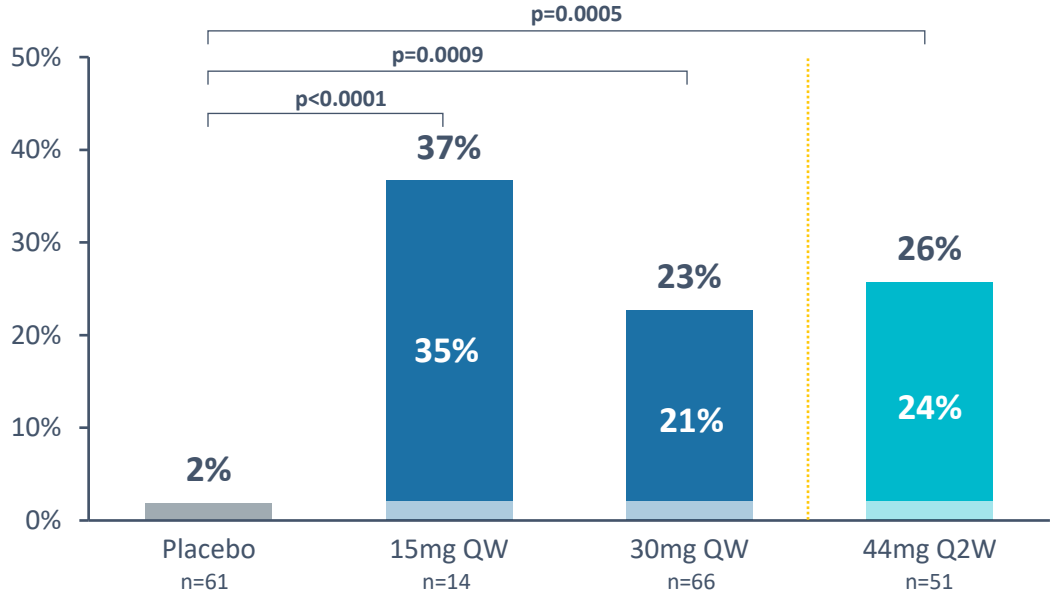
*Drug response as multiple of placebo response is calculated by dividing drug response by placebo response

[1] Results same for Completer Analysis Set; [2] ≥1 stage fibrosis improvement with no worsening of NAS

ns= not significant

Note: These data are derived from different clinical trials at different points in time, with differences in trial design and patient populations. As a result, cross-trial comparisons cannot be made, and no head-to-head clinical trials have been conducted.

Pegozafermin Demonstrated Statistical Significance on NASH Resolution at All Doses



Relative Risk*	1.0	**18.8**	**11.8**	**13.5**

- Results were statistically significant for both doses using a ITT analysis (imputes patients with missing biopsies as non-responders) and completers analysis

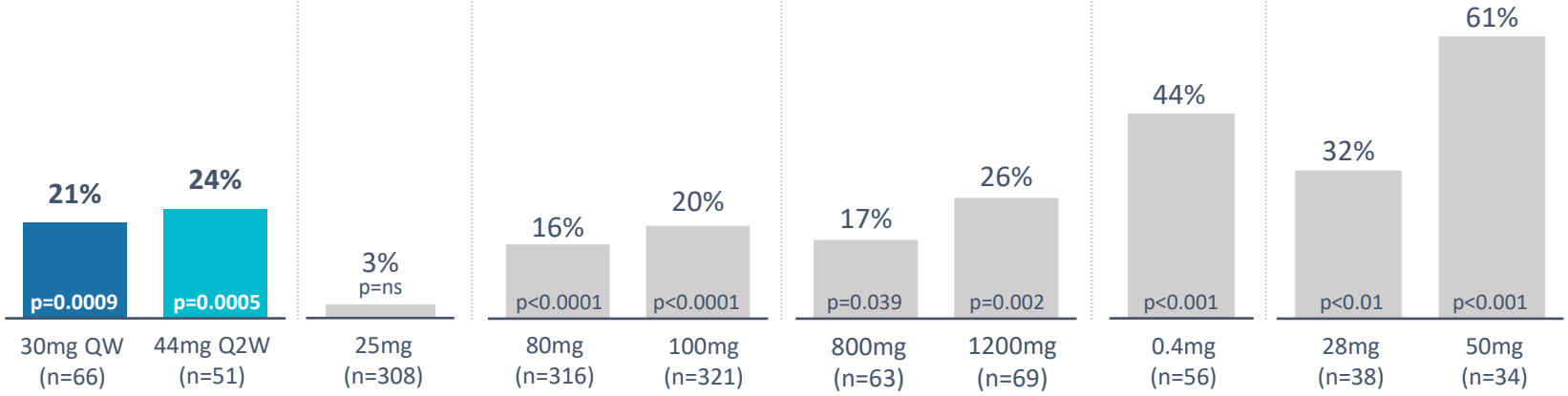
Relative risk is calculated by dividing drug response by placebo response

* Relative risk presented is calculated by dividing the drug response by placebo response. Relative risk calculated using statistical methods show similar results.
Source: Full Analysis Set; multiple imputation analysis via Cochran-Mantel-Haenszel (CMH) test stratified by T2DM status (yes vs. no) and fibrosis stage (F2 vs. F3).

Clinical Data in Pre-Cirrhotic Patients

NASH Resolution with No Worsening of Fibrosis

	89bio		Intercept	Madrigal Pharmaceuticals	inventiva	novo nordisk	akero
	Pegozafermin	**Pegozafermin**	Ocalivia	Resmetirom[2]	Lanifibranor	Semaglutide	Efruxifermin
	Phase 2b | 24 weeks Multiple Imputation[1]	**Phase 2b | 24 weeks Multiple Imputation[1]**	Phase 3 | 72 weeks	Phase 3 | 52 weeks	Phase 2b | 24 weeks	Phase 2 | 72 weeks	Phase 2b | 24 weeks Completers Analysis
Drug response as multiple of placebo response*	**11.8**	**13.5**	1.9	2.6	3.0	1.7	2.1	3.5	3.1	5.1
	21%	**24%**	3%	16%	20%	17%	26%	44%	32%	61%
	p=0.0009	**p=0.0005**	p=ns	p<0.0001	p<0.0001	p=0.039	p=0.002	p<0.001	p<0.01	p<0.001
	30mg QW (n=66)	**44mg Q2W (n=51)**	25mg (n=308)	80mg (n=316)	100mg (n=321)	800mg (n=63)	1200mg (n=69)	0.4mg (n=56)	28mg (n=38)	50mg (n=34)

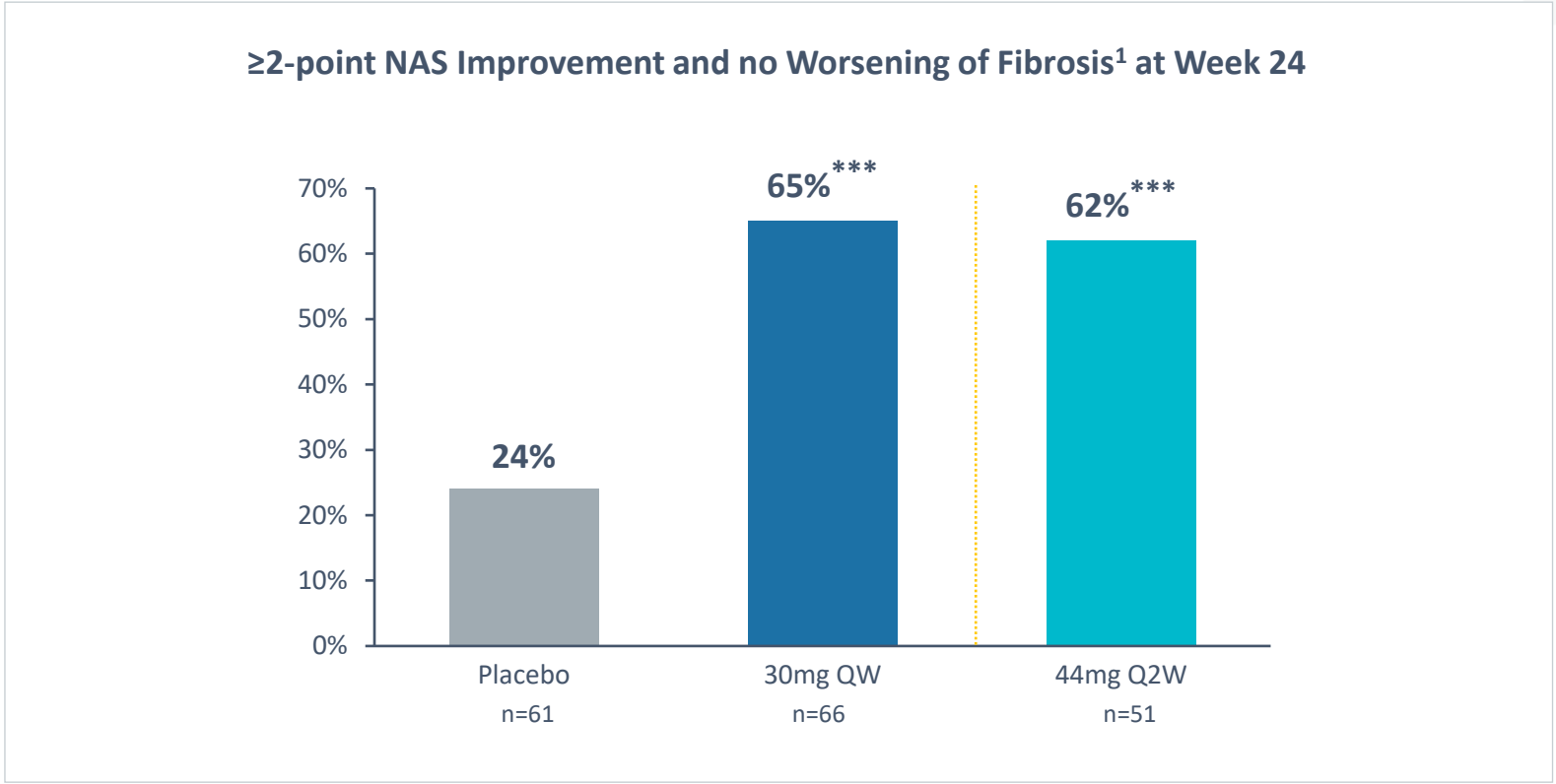


* Drug response as multiple of placebo response is calculated by dividing drug response by placebo response

[1] Results same for Completer Analysis Set; [2] NASH resolution with ≥2 point reduction in NAS and no worsening of fibrosis

Note: These data are derived from different clinical trials at different points in time, with differences in trial design and patient populations. As a result, cross-trial comparisons cannot be made, and no head-to-head clinical trials have been conducted.

Pegozafermin Demonstrated Statistical Significance on ≥2-point NAS Improvement

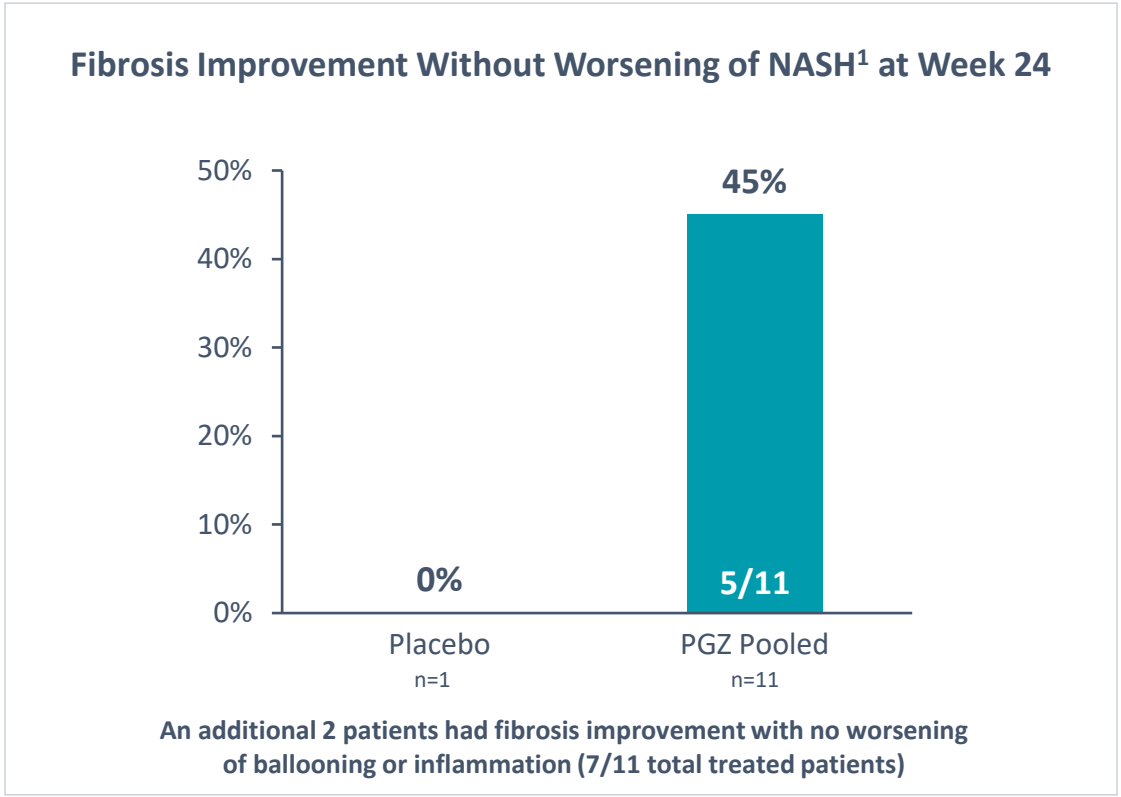


Results for the 15mg QW dose: 37%

[1] Full Analysis Set. Analysis via Cochran-Mantel-Haenszel (CMH) test stratified by T2DM status (yes vs. no) and fibrosis stage (F2 vs. F3)

***p<0.001 versus placebo.

Descriptive Analysis Data of Cirrhotic (F4) Patients from ENLIVEN

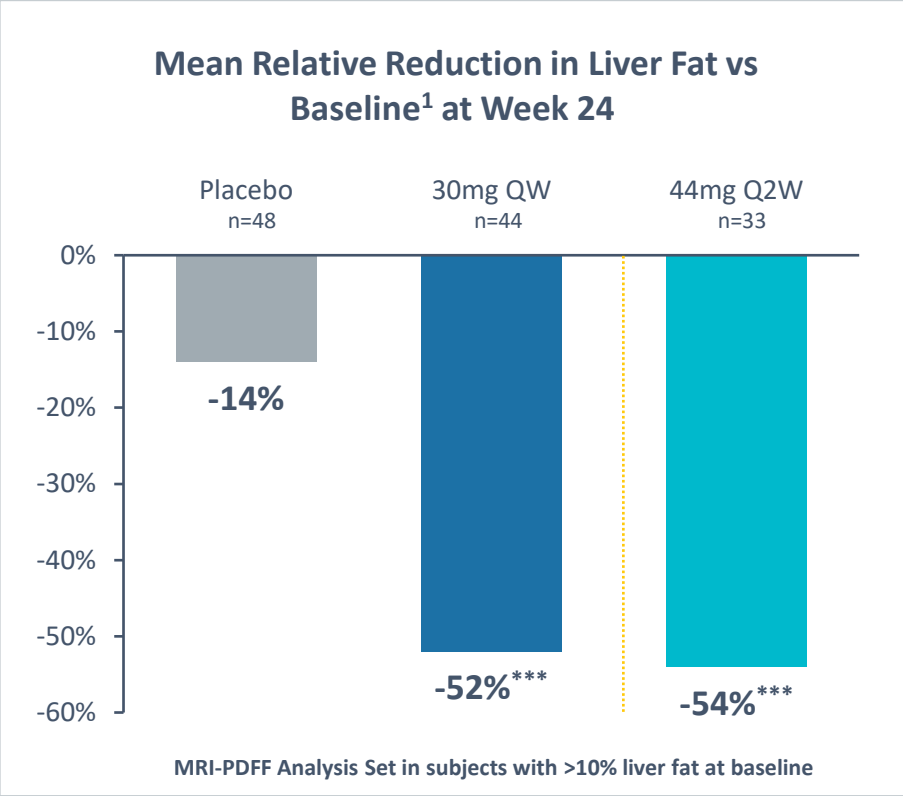


EXPANSION COHORT OF THE PHASE 1B/2A TRIAL[2]

- In putative F4 subjects (n=6/19), fibrosis improvement ≥1 stage without worsening of NASH ranged from 17% to 57%

[1]Improvement in liver fibrosis by ≥1 stage and no worsening of steatohepatitis defined as no increase in NAS for ballooning, inflammation, or steatosis 12/14 cirrhotic patients enrolled in ENLIVEN had follow-up biopsies at week 24 (11 treated patients and 1 placebo patient).
[2]American Association for the Study of Liver Diseases (AASLD) 2022 (abstract #36901).

Pegozafermin Demonstrated Robust Liver Fat Reduction with High Responder Rates by MRI-PDFF at Week 24



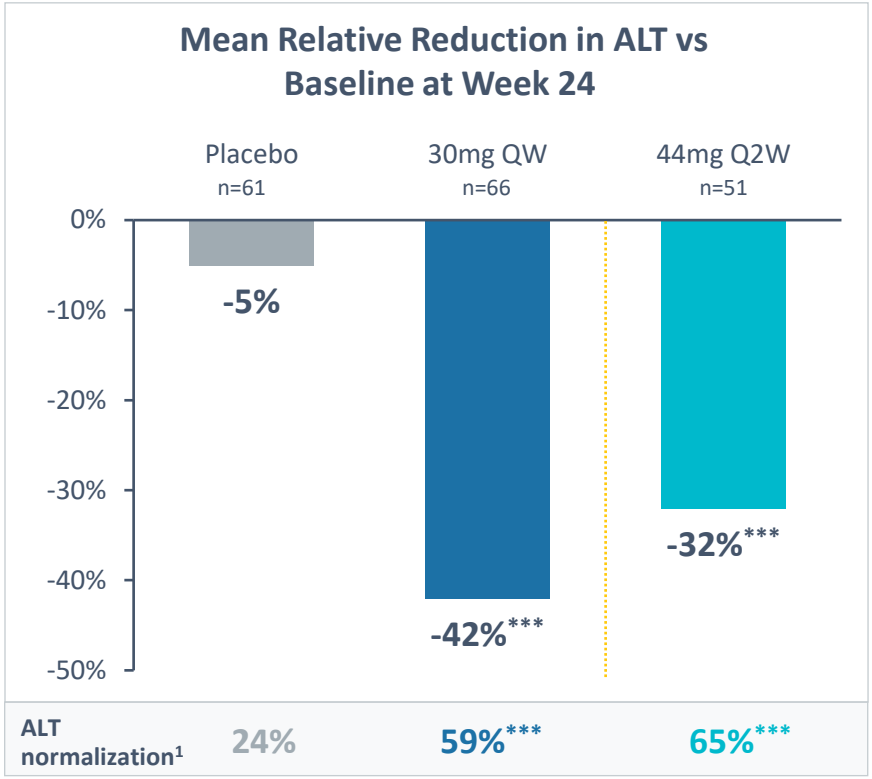
Proportion of Patients Achieving ≥50% Reductions in Liver Fat[2] at Week 24

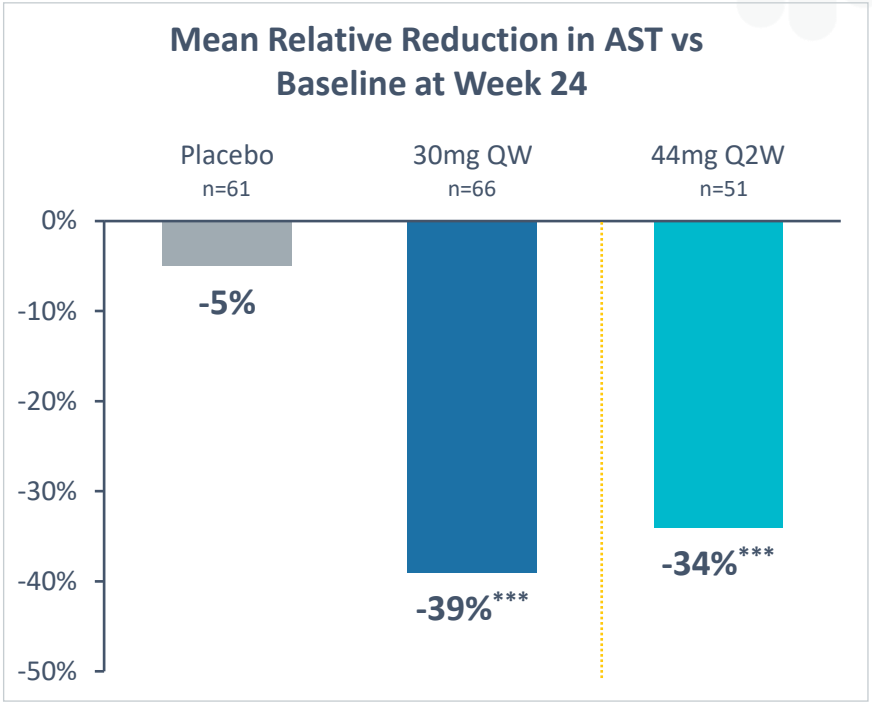
Placebo (n=48)	30mg QW (n=44)	44mg Q2W (n=33)
13%	66%***	67%***

Results for the 15mg QW dose: -33% (n=12; p=ns)

[1]Analysis via mixed model repeated measure (MMRM). [2]Analysis via Cochran-Mantel-Haenszel (CMH) test stratified by T2DM status (yes vs. no) and fibrosis stage (F2 vs. F3).
***p<0.001 versus placebo

Pegozafermin Demonstrated Significant Improvements in Markers of Liver Injury (ALT and AST)





ALT Results for the 15mg QW dose: -38% (n=14; p<0.01)

[1]ALT normalization defined as patients with ALT ≥30 U/L at baseline (n=133) with end-of-study ALT <30 U/L.

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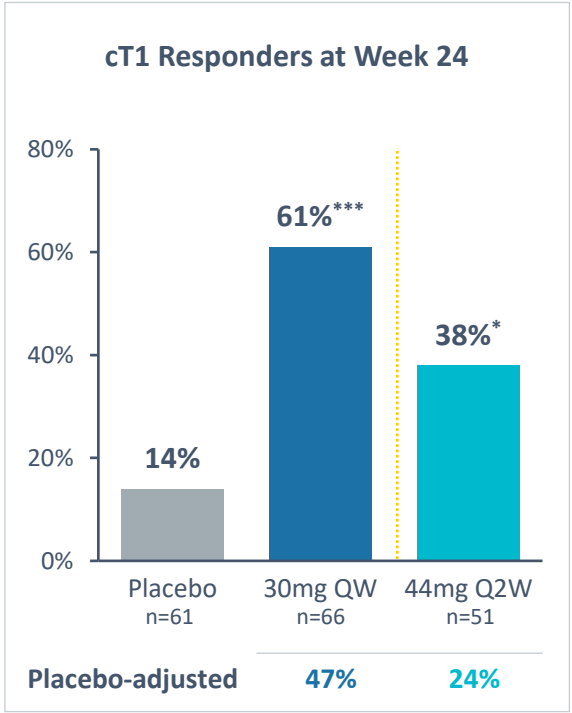
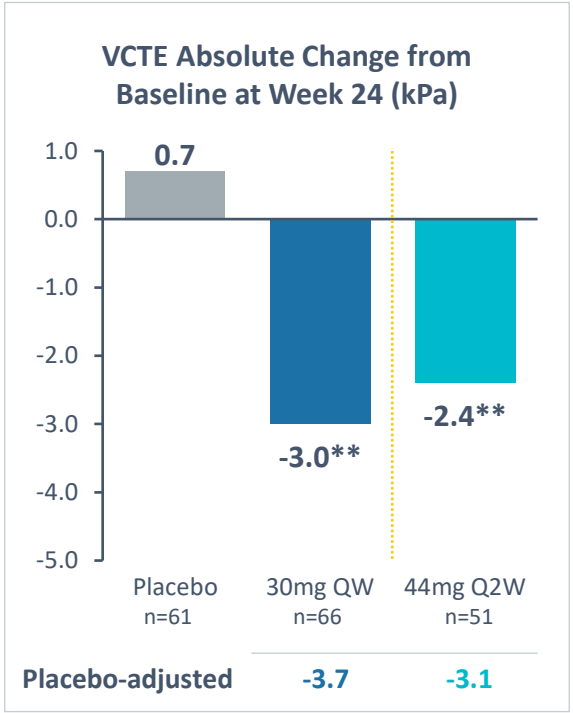
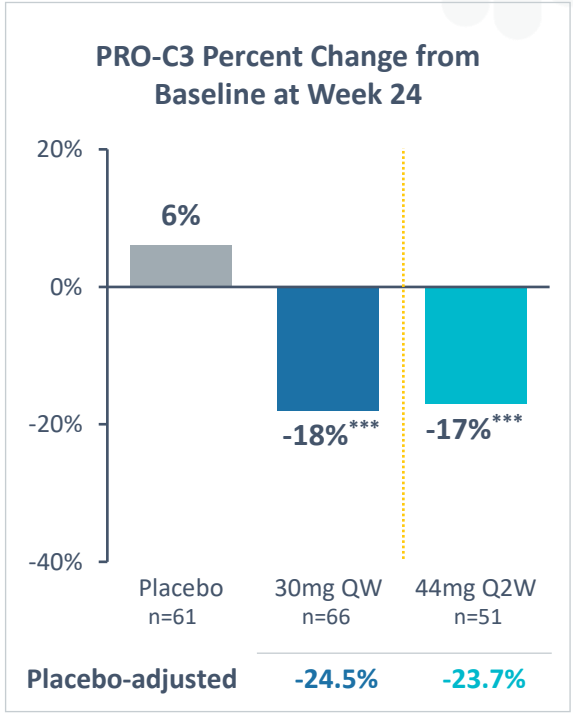
Source: Full Analysis Set: Analysis via mixed model with repeated measure (MMRM). Data presented as LS Means.
***p<0.001 versus placebo.

Pegozafermin Demonstrated Significant Reductions in Non-Invasive Markers (NITs) of Hepatic Inflammation and Fibrosis







Results for the 15mg QW dose: cT1 40% (n=10; p=ns); VCTE -1.6 kPa (n=14; p=ns); PRO-C3 -5% (n=14; p=ns).

Source: Full Analysis Set for FibroScan and PRO-C3 assessments and MRI-PDFF analysis set for cT1, Analysis via MMRM for cT1 and PRO-C3, ANCOVA for VCTE. A patient is designated a cT1 responder with ≥80 msec reduction as compared to baseline. cT1 analysis was performed at sites where available.
*p<0.05, **p<0.01, ***p<0.001 versus placebo.

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Pegozafermin Was Well Tolerated Across Doses

Low incidence of treatment-related TEAEs

Drug-related TEAEs in ≥10% of patients

Preferred Term	Placebo (n=69)	15mg QW (n=21)	30mg QW (n=72)	44mg Q2W (n=57)
Diarrhea	3%	24%	17%	9%
Nausea	1%	14%	21%	18%
Injection site erythema	3%	14%	14%	5%
Injection site rash	1%	0	10%	4%
Increased appetite	0	10%	13%	5%

Most TEAEs were grade 1 or 2. No tremor reported.

	Placebo	15mg QW	30mg QW	44mg Q2W
Drug-related AEs leading to discontinuation	0	5%[a]	6%[b]	2%[c]
Drug-related Serious Adverse Event (SAE)	0	0	0	2%[c]

Related discontinuations: [a] Diarrhea [15 mg QW] ; [b] Diarrhea [30 mg QW]; Nausea [30 mg QW]; Diarrhea [30 mg QW]; ISR erythema [30 mg QW]; [c] Pancreatitis [44 mg Q2W].
Unrelated discontinuations: Angina [placebo]; Colon CA [30 mg QW]; COVID-19 [30 mg QW].

89bio Source: Safety Analysis Set. AE table cutoff ≥10% of patients for placebo, 30mg QW and 44mg Q2W doses.

Poised for Phase 3 Advancement in NASH

Proposed regulatory and clinical development plans*

- Meeting with FDA planned in 2H23; pursue EU scientific advice in parallel
- Phase 3 trial in F2/F3 patients with histology endpoint for accelerated approval
- Phase 3 trial in F4 patients with outcomes endpoint for full approval (study in parallel)
- Planned SHTG Phase 3 trials are expected to satisfy safety database requirements and for approval in SHTG

* Subject to regulatory approval.

Pegozafermin Has Potential to Address a Large Commercial Opportunity

NASH represents a large patient population with significant health risks

- 13M F2-F4 patients eligible in the United States with equivalent number in EU

Significant market opportunity for pegozafermin as injectable therapy

- Pegozafermin positioned for medium-high risk (F2/F3) non-cirrhotic patients and compensated cirrhotic patients
- Large markets in other disease areas have supported multiple competing orals and injectables, with potent injectables often dominating
  - Injectable GLP-1s account for >$20B of $38B in worldwide sales of branded type 2 diabetes drugs despite competing against oral SGLT2 and DPP-4 inhibitors
  - Subcutaneous injectable immunomodulators for rheumatoid arthritis and plaque psoriasis dominate sales (70%) and market share (80%) vs oral competitors
- Best-in-category mechanisms often have multiple successful drug with the same MOA
  - 4 different GLP-1s for T2DM each had sales > $1B in 2022 (two were the 4th and 5th entrants)
  - 4 different SC anti-IL23 and anti-IL17 drugs for plaque psoriasis each had sales > $1B in 2022

Pegozafermin Has Potential to Address a Large Commercial Opportunity

Pegozafermin has demonstrated a differentiated profile across key attributes in a chronic asymptomatic condition: Efficacy, Tolerability, Convenience

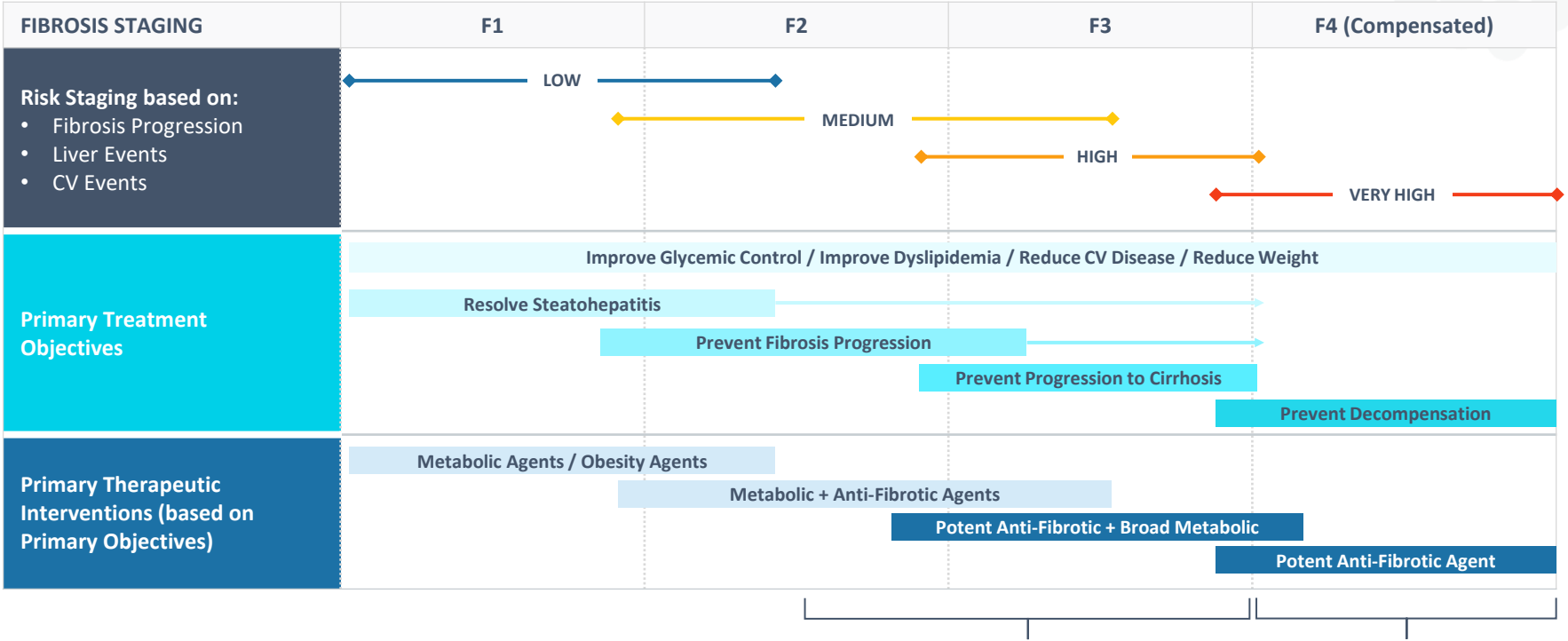
- Pegozafermin has demonstrated potential best-in-class potency with superior tolerability
  - GI adverse events impact patient lives; #1 non-efficacy reason for GLP-1 discontinuations
- Less frequent dosing is highly meaningful to patients and offers physicians optionality
  - 66% of patients would strongly prefer or prefer every-two-week to weekly dosing
  - Competitive markets have shown a preference for extended dosing; Humira ($21B) and Dupixient ($9B) are dosed Q2W; Fasenra (anti-IL5) for eosinophilic asthma with similar efficacy profile but less frequent dosing vs. its competitor reached sales parity despite launching 2 years later

Payers recognize the value proposition in NASH

- Payers expecting premium pricing based on medical necessity
- Payers are unlikely to require diagnostic biopsies to approve treatment

* Primary research with US payers, October 2020

NASH Treatment Paradigm & Pegozafermin Positioning



Based on data generated to date, we believe pegozafermin has 2 primary opportunities to be positioned in the NASH treatment paradigm:

As a potent anti-fibrotic and anti-metabolic

As a potent anti-fibrotic

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Opportunity in Severe Hypertriglyceridemia (SHTG)

Pegozafermin Could Offer an Important New Treatment Option for SHTG

Large growing patient population with significant health risks; overlap with NASH patient population

- Increasing TG levels increase risk of acute pancreatitis, cardiovascular disease and all-cause mortality
- Emerging evidence of the cardiovascular (CV) benefit associated with TG reduction in patients with CV risk factors

Significant market opportunity for agent with broad metabolic benefits

- Pegozafermin has a unique selling proposition that is meaningful to prescribers – more effective triglyceride reduction with improvements in liver fat and other metabolic measures
- Highly differentiated from approved therapies based on superior broad efficacy and/or safety
- Analyst consensus peak year sales estimated to be greater than $1 billion (US only)

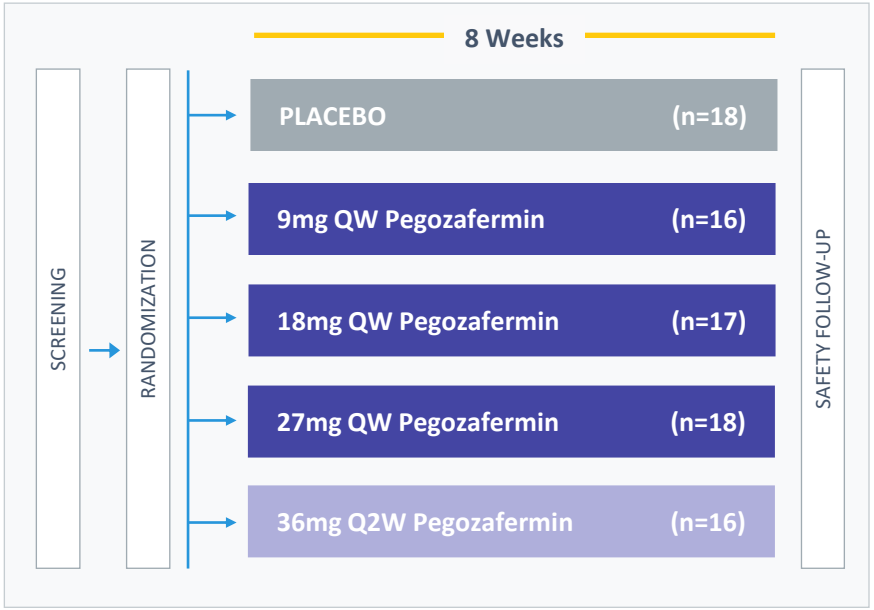
Clinical program substantially de-risked

- Phase 3 design similar to positive Phase 2 (ENTRIGUE) design with same primary endpoint
- Agency provided feedback to company on key elements of regulatory path to approval

SHTG program is synergistic with the NASH program

- Development: Leverages safety database across the two programs to minimize spend across total program
- Commercial: Leverage sales force and infrastructure costs

ENtrigue – Phase 2 SHTG Trial Design



Magnetic Resonance Imaging – Proton Density Fat Fraction
QW, once-weekly; Q2W, once every two weeks.
Safety analysis set, n=85 (patients who received at least 1 dose)
Full analysis set, n=82 (patients with at least 1 post-baseline TG assessment)
MRI analysis set n=23 (patients with baseline and end of treatment MRIs)

KEY INCLUSION CRITERIA

- TG ≥500mg/dL and ≤2,000mg/dL
- Background therapy: statins and/or prescription fish oil and/or fibrates OR none

PRIMARY ENDPOINT

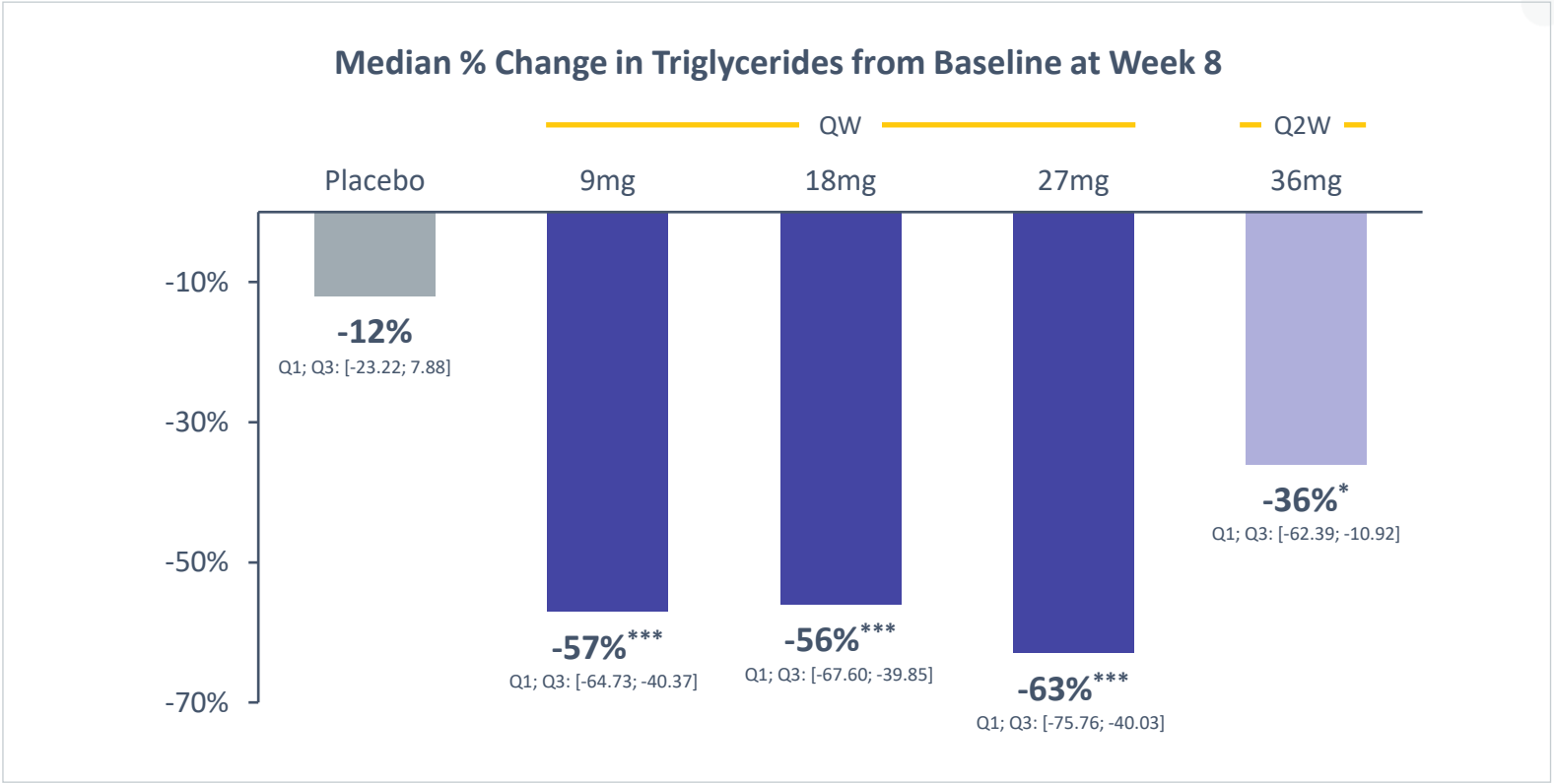
- Primary endpoint: % Change in TGs from baseline

KEY SECONDARY ENDPOINTS

- Lipids: non-HDL-C, HDL-C, Apo-B
- Liver fat (MRI-PDFF)
- Glycemic control

Pegozafermin Significantly Reduces Triglycerides Across All Dose Groups

Primary Endpoint



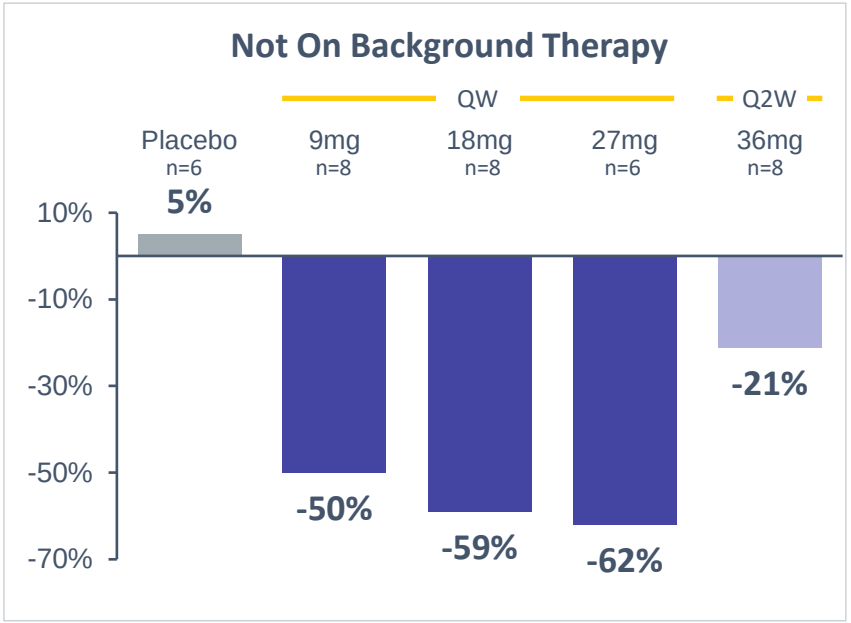
QW: Every week; Q2W: Every 2 weeks

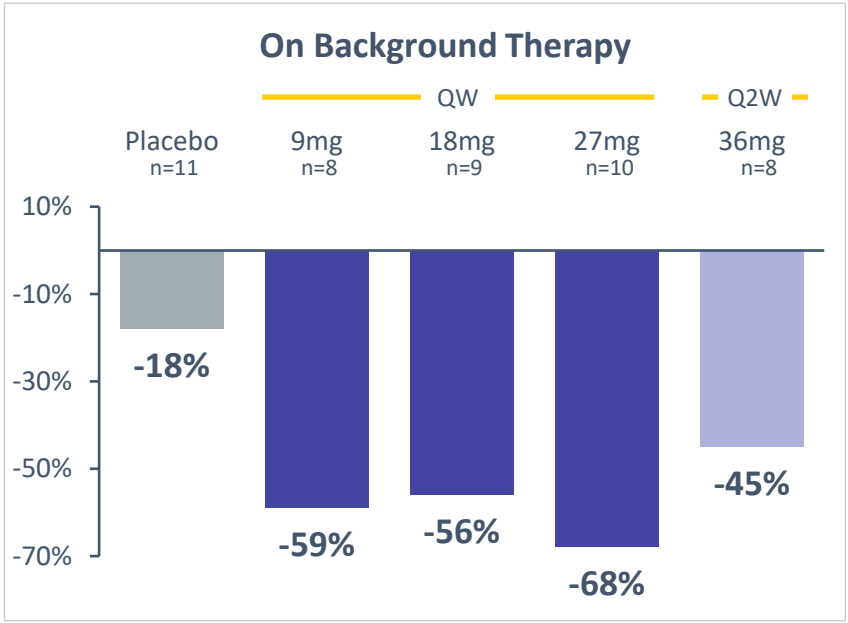
p value vs placebo for change from baseline based on Wilcoxon Rank-Sum Test

Full Analysis Set; * p<0.05; ** p<0.01; *** p<0.001 vs. placebo

Pegozafermin Shows Significant Decrease in Triglycerides on Top of Background Therapy

Median % Change in Triglycerides from Baseline at Week 8



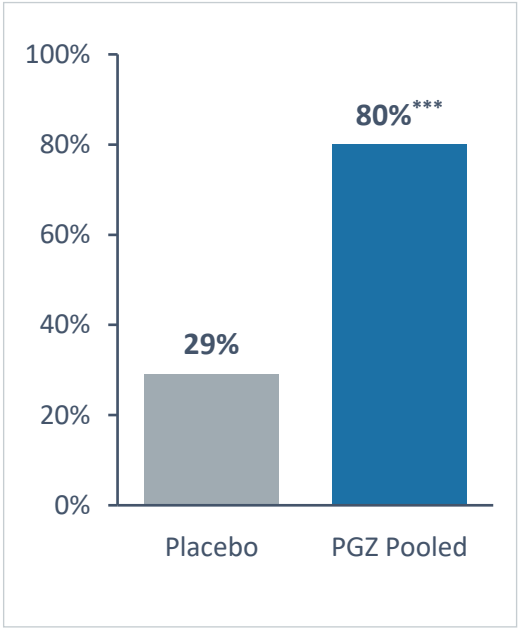


Results are consistent with data from patients on background therapy of statins or statin combos, prescription fish oils, and fibrates

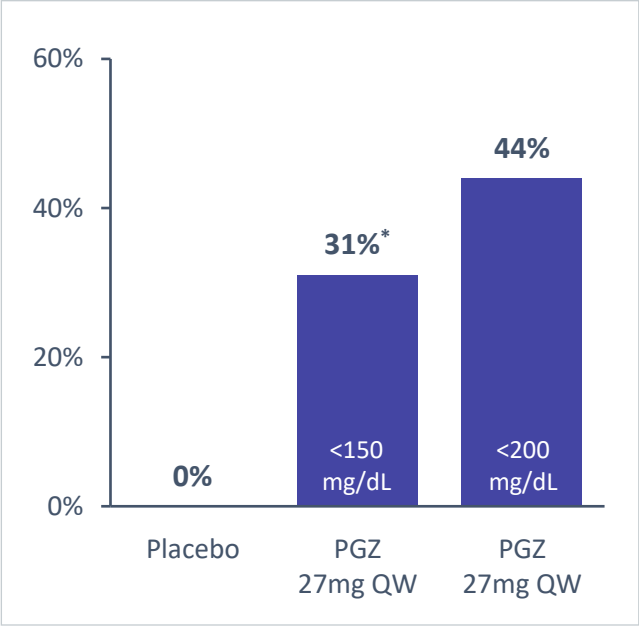
Background therapy defined as concomitant lipid-modifying therapy
Full Analysis Set

Pegozafermin Shows Significant Decrease in Triglycerides at Different Threshold Levels

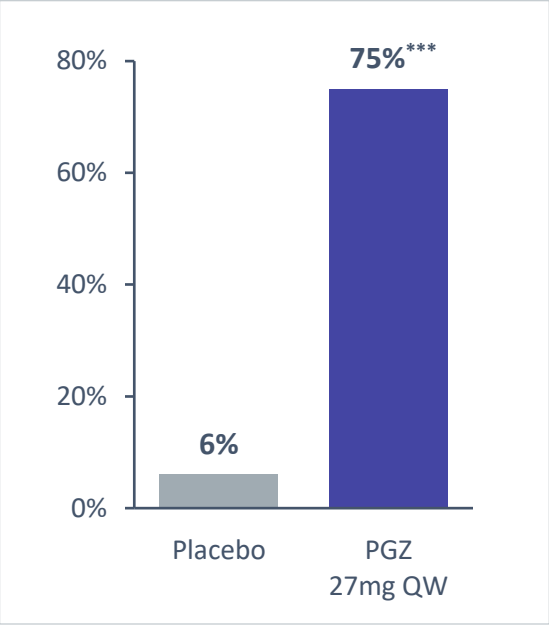
A. Responders (< 500 mg/dL)



B. TG Normalization (<150mg/dL, <200mg/dL)



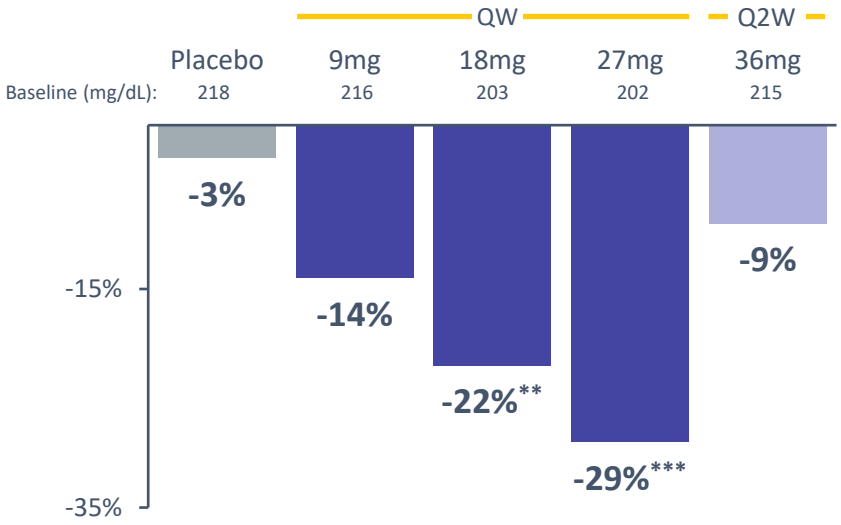
C. TG Reduction ≥50% from baseline



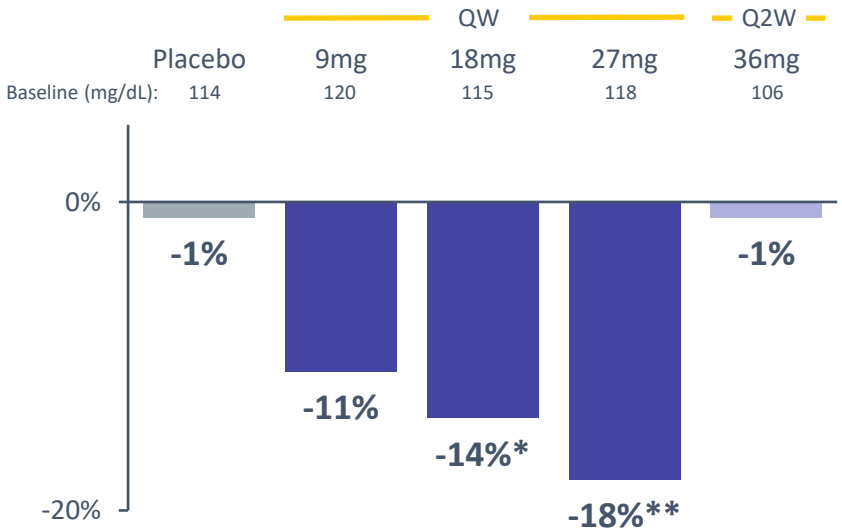
Analysis via unstratified Chi-square Test comparing the individual PGZ groups vs placebo. * p<0.05; ** p<0.01; *** p<0.001 vs. placebo
TG Responders defined as patients who achieve TG <500 mg/dL
Full Analysis Set

Pegozafermin Demonstrated Clinically Meaningful Improvements in Non-HDL-C and Apo-B – Key Marker of CV Risk

Mean % Change from Baseline at Week 8 Non-HDL-C



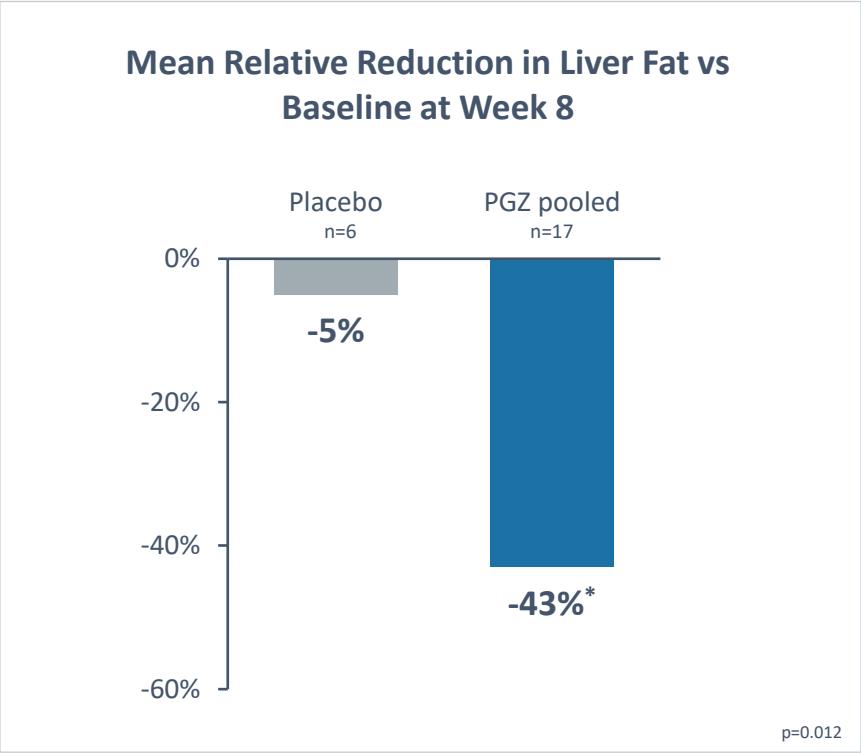
Mean % Change from Baseline at Week 8 Apo-B



Full Analysis Set; * p<0.05; ** p<0.01; *** p<0.001 vs. placebo based on MMRM analysis

Pegozafermin Demonstrated Significant Reduction in Liver Fat

Liver Fat Is an Important Potentiator of CV Risk



HIGH RESPONDER RATES

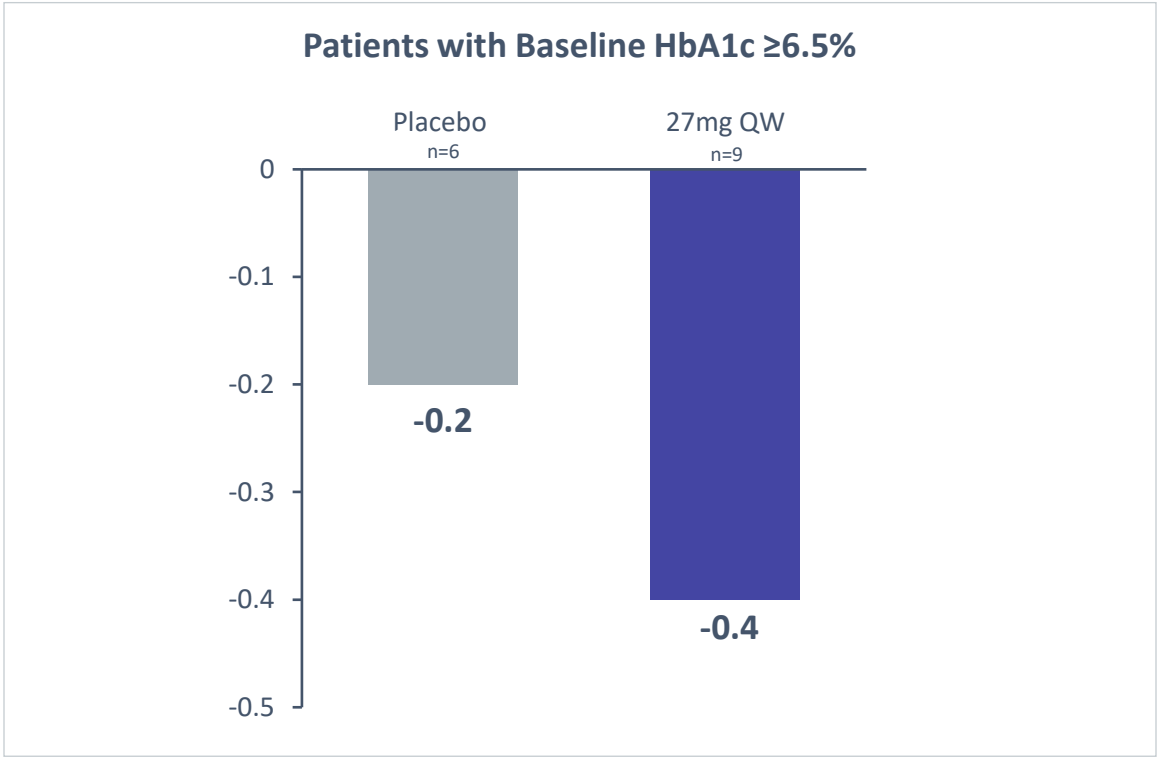
- **≥30% Reduction in liver fat: 88%** *vs 0% in placebo*
- **≥50% Reduction in liver fat: 41%** *vs 0% in placebo*
- **Normalized liver fat: 24%** *vs 0% in placebo*

Pegozafermin (n=17) and Placebo (n=6)
Post-hoc analysis of patients with follow-up MRI-PDFF ≤21 days from date of last dose (n=14) resulted in 29% of patient with normalized liver fat and 100% and 50% of patients with mean relative reductions of ≥30% and ≥50% from baseline, respectively.

Post-hoc analysis of patients with follow-up MRI-PDFF ≤21 days from date of last dose in 27mg QW cohort (n=5) demonstrated a 63% mean relative reduction from baseline.
*p <0.05 vs. placebo
MRI Analysis Set; p value vs placebo based on ANCOVA analysis

Pegozafermin Demonstrated Improvement on HbA1c that May Increase With Longer Treatment

Absolute Change in HbA1c at Week 8



HbA1c: Mean Baseline 27 mg QW: 7.48%; Week 8: 7.08%

89bio Full analysis set; MMRM analysis

Pegozafermin Demonstrated Favorable Safety/Tolerability in Phase 2 Study

- Pooled pegozafermin treatment related Adverse Events (AEs) observed in ≥7.5% of patients were:
  - Nausea (10%), diarrhea (9%) and injection site reaction (9%) vs placebo (0%)
  - All Gastrointestinal (GI) AEs were Grade 1 or 2
- No Grade 3 or higher AEs
- No treatment-related SAEs; 2 treatment-related discontinuations at 27mg QW (both Grade 2)
- No tremor or hypersensitivity AEs reported
- No adverse effects on blood pressure or heart rate

Phase 3 Program Initiation Planned in First Half of 2023

Regulatory

- FDA feedback supports advancement into Phase 3
- FDA feedback confirms key elements of the overall Phase 3 development program*
  - Primary endpoint: TG reduction from baseline (anticipated to be assessed at the 26-week timepoint)
  - Proposed doses
  - Two well-controlled Phase 3 trials in SHTG patients of one year duration will contribute to the efficacy and safety database required to support the registration package

Clinical development

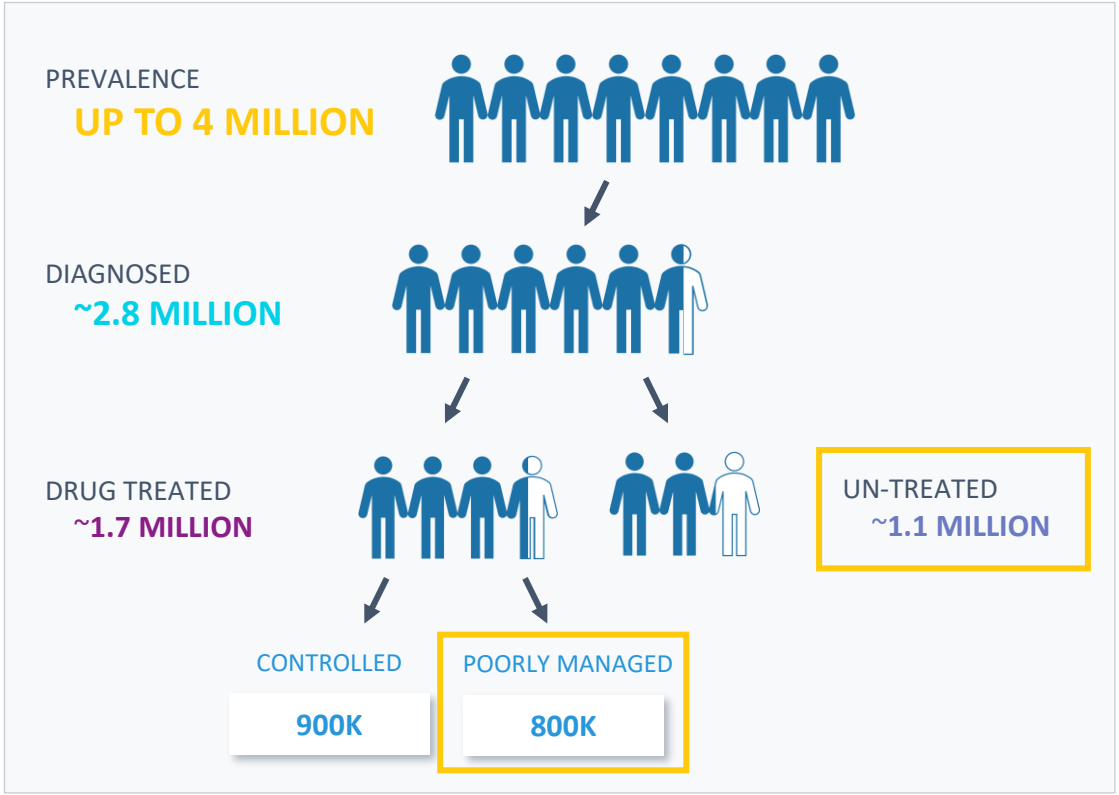
- Trial start-up activities underway – plan to initiate the first SHTG Phase 3 trial in 2Q23

Technical Operations

- Developed new pre-filled syringe using liquid formulation for use in planned Phase 3 SHTG trial in 2Q23

89bio *Finalizing details of the pivotal studies as well as the composition of the safety database; final protocol subject to FDA approval

SHTG Represents a Large Population with High Unmet Need



PEGOZAFERMIN TARGET POPULATION

Co-morbidity	Prevalence in SHTG population
Fatty Liver Disease (NAFLD)	Up to **100%**
Type 2 diabetes/Prediabetes	Up to **70%**
Dyslipidemia	Up to **65%**

Pegozafermin profile is unique and compelling to physicians because of potential for metabolic benefits

Pegozafermin Delivers on Key Attributes for Successful SHTG Therapy

MINOR INFLUENCE — MODEST INFLUENCE — MAJOR INFLUENCE

Hierarchy of Attributes for SHTG Therapy

RoA/Dosing

- RoA and dosing were seen as the least influential given familiarity with injectables in T2D

Clinical Outcomes

- Physicians noted that clinical outcomes are not required to drive utilization in SHTG

Physicians were receptive to using TG as a surrogate endpoint

Safety/Tolerability

- Safety and tolerability have a lesser impact on treatment decisions compared to efficacy

Metabolic Endpoints

- Metabolic endpoints were viewed as additive benefits
- Fatty liver, HbA1c, and weight loss serve as differentiators

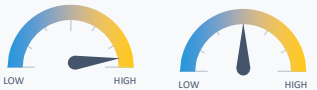
TG Endpoints

- TG lowering is the most influential endpoint to drive utilization
- Significant efficacy improvement over SoC will drive utilization

PEGOZAFERMIN ATTRIBUTES

- Generally well-tolerated
- 43% mean relative reduction in liver fat[1]
- 0.4% absolute reduction in HbA1c[2]
- 63% reduction in TG from baseline[2]
- 80% of subjects achieved TG<500mg/dL[1]

Physician Enthusiasm for Metabolic Endpoints



Liver fat reduction — Decrease in HbA1c

[1]Pooled pegozafermin data at week 8
[2]27mg pegozafermin data at week 8
RoA: Route of Administration.
Source: Physician Interviews; ClearView Analysis, 2022.

Pegozafermin Profile Supports Utilization Over Current SoC and Future Competitive Agents

	IN DEVELOPMENT		APPROVED			
	Pegozafermin Potential	APOC3 Potential	Fibrates	Prescription Fish Oils		Statins
				Vascepa	Lovaza	
Triglyceride reduction	✓✓✓	✓✓✓	✓✓	✓	✓✓	✓✓
Liver fat/Fibrosis reduction	✓/✓	✓/–	Worsens liver fat	–	–	–
Insulin sensitizing	✓	–	–	–	–	–
Apo-B lowering	✓	✓	–	✓	–	✓
ALT lowering	✓	Transaminase elevations observed	Monitor ALT	–	May require ALT monitoring	Monitor ALT

For triglyceride reduction: ✓✓✓ = ≥60%, ✓✓ = 31%-59%, ✓ = ≤30% – No effect/Not reported

Sources: Feingold KR. Triglyceride Lowering Drugs. [Updated 2021 Apr 1]. In: Feingold KR, Anawalt B, Boyce A, et al., editors. Prescribing information. Corporate presentations.
Note: All data regarding third-party molecules on this slide are based on third-party studies, which are in different stages of development, and not our own.
Conclusions on this slide are company estimates and are not based on head-to-head results.

Corporate Highlights

- Late-stage clinical development company entering Phase 3 in NASH and SHTG
- Pegozafermin (FGF21 analog) has demonstrated differentiation within class and category and has the potential to be transformational for patients
- Strong balance sheet ($480.9M* in cash, cash equivalents and short-term investments)
- Highly experienced team with track record of execution

* as of March 31, 2023

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Appendix

Experienced Management Team Positions 89bio for Success

Rohan Palekar

CEO

CEO, CCO experience

Commercial, strategy, and R&D experience

Otsuka AVANIR PHARMACEUTICALS MEDIVATION J&J

Hank Mansbach, MD

CMO

20+ years biopharma and R&D leadership in clinical development and medical affairs

ultragenyx MEDIVATION VALEANT Pharmaceuticals International, Inc. gsk

Ryan Martins

CFO

CFO, Strategy/IR, finance, sell-side experience

REVOLUTION MEDICINES ultragenyx pharmaceutical Jefferies CHIRON LEHMAN BROTHERS LAZARD BARCLAYS

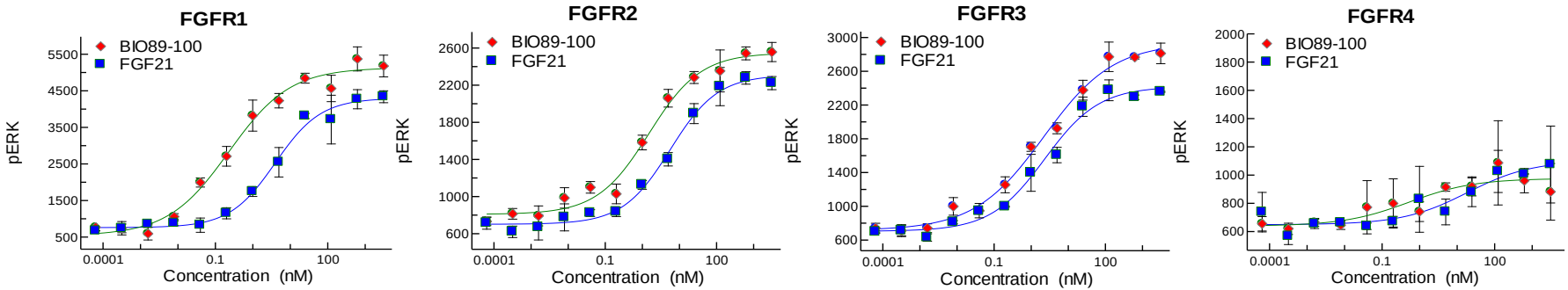
Quoc Le-Nguyen

CTO & Head of Quality

20+ years biopharma and leadership in technical operations, product supply, and quality

Aduro NOVARTIS BIOMARIN BAYER

Pegozafermin Exhibits Highly Potent FGF Receptor Agonism



Pegozafermin has the potential to reproduce the beneficial metabolic effects of native FGF21

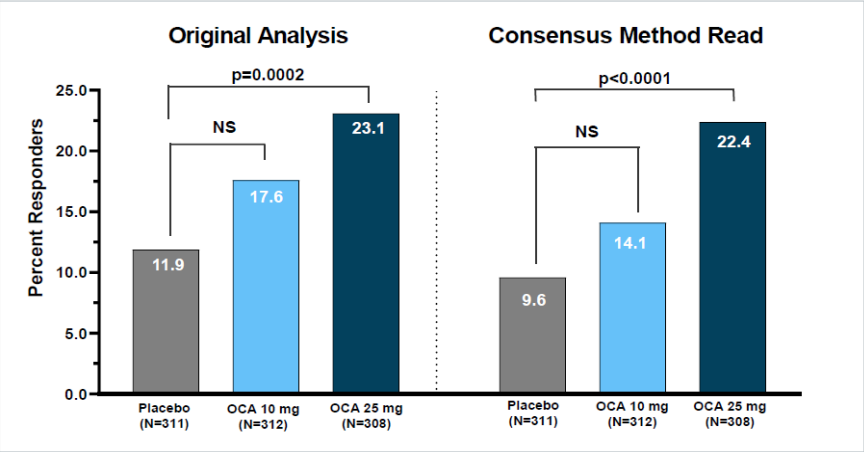
RECEPTOR	FGF21	Pegozafermin
	EC_{50} (nM)	EC_{50} (nM)
	Mean ± S.D.	Mean ± S.D.
KLB	nd	nd
KLB/FGFR1	4.5 ± 1.0	0.3 ± 0.07
KLB/FGFR2	4.5 ± 0.9	1.1 ± 0.4
KLB/FGFR3	1.8 ± 0.3	1.2 ± 0.4
KLB/FGFR4	nd	nd

nd – not determined; rhFGF19 EC_{50} at FGFR4 = 1.7 ± 0.4

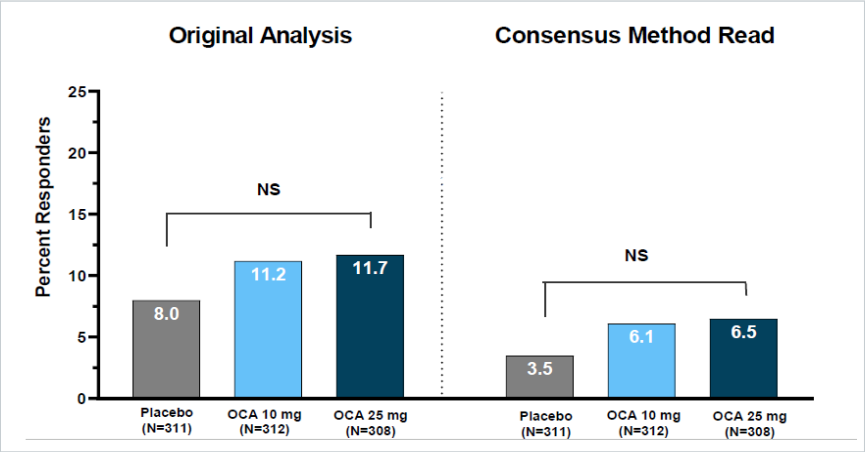
* Receptor agonism measured in L6 cells expressing β-klotho and either FGF Receptor 1c, 2c, 3c, or 4 via pERK functional assay
** Figures represent data from a single experiment; Table represents mean data from multiple experiments

Learnings from the Obeticholic Acid NASH Phase 3 Program: Comparison of Single Central Reader vs. 3-Panel Consensus

Improvement of Fibrosis by ≥ 1 Stage without Worsening NASH



Resolution of NASH with No Worsening of Liver Fibrosis



OBSERVATIONS:

- Placebo response for NASH resolution is >2 fold higher with single reader vs 3-panel consensus
- Placebo response similar to ENLIVEN study for both fibrosis improvement and for NASH resolution

IMPLICATIONS:

- 3-panel consensus highlights treatment delta but dampens absolute response
- 3-panel consensus methodology can reproduce low placebo response in phase 3 trial

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REGENERATE re-analysis topline, July 2022.

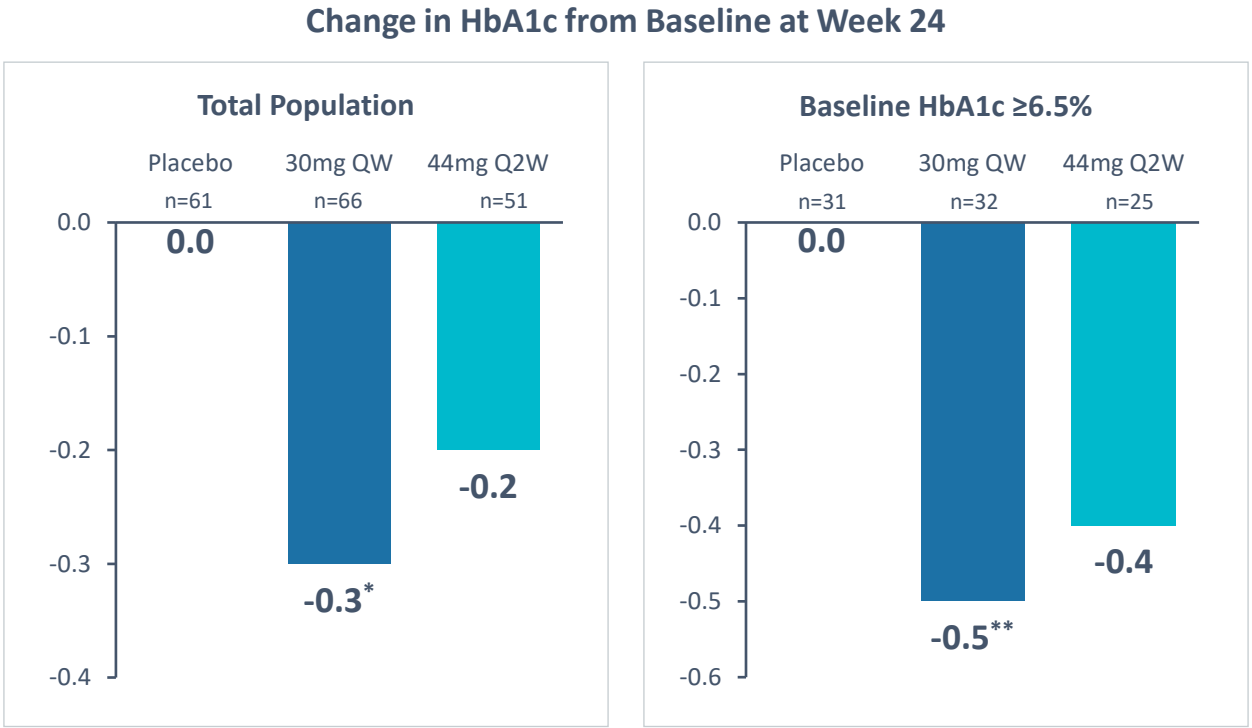
Pre-Specified ITT Analysis Confirms Robustness of Primary Efficacy Results

ITT (missing data = non-responder); (n=192) at Week 24

	30mg QW	44mg Q2W
Fibrosis improvement without worsening of NASH		
Effect Size (placebo-adjusted)	15%	16%
p-value	0.019	0.015
NASH resolution without worsening of fibrosis		
Effect Size (placebo-adjusted)	17%	20%
p-value	0.0019	0.0009

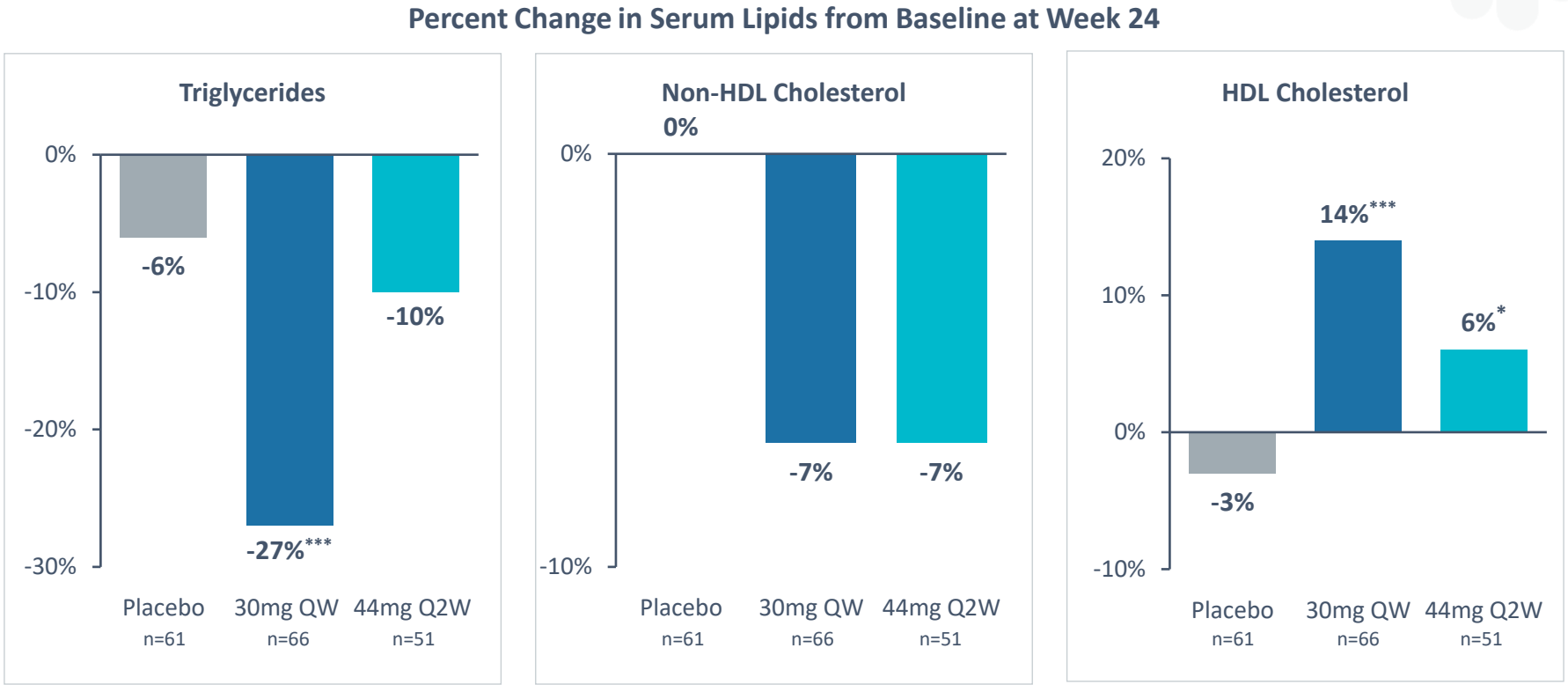
Source: FAS

Pegozafermin Demonstrated Meaningful Reductions in HbA1c (ENLIVEN)



Source: Full Analysis Set for either overall population or FAS with baseline HbA1c ≥6.5%. Analysis via MMRM.
*p<0.05, **p<0.01 versus placebo.

Pegozafermin Demonstrated Meaningful Changes in Serum Lipids (ENLIVEN)



Source: Full Analysis Set. Analysis via van Eltren Test for triglycerides (reported as median) and mixed model with repeated measure (MMRM). Subjects with missing week 24 triglycerides are excluded from the non-parametric analysis.
Non-HDL-cholesterol and HDL Cholesterol (reported as LS means) with changes from baseline (absolute or %) as dependent variables.
*p<0.05, **p<0.01, ***p<0.001 versus placebo.

Comparative Profile of FGF21 Analogs - Histology and Liver Markers

	Pegozafermin (PGZ)		Efruxifermin (EFX)	
	30mg QW	44mg Q2W	28mg	50mg
Structure (molecular weight)	• GlycoPEGylated FGF21 (40 kDa) • Structurally different from other monovalent analogs		Fc-fusion FGF21 (92 kDa)	
Potency against FGF receptors (EC50)[1]	**PGZ (rFGF21)**		**EFX (rFGF21)**	
1c/2c/3c	0.3 (4.5)/1.1 (4.5)/1.2 (1.8)		0.3 (0.08)/0.7 (0.4)/1.9 (1.0)	
Efficacy (histology)				
Methods	• Rigorous biopsy reading 3 separate independent reader (no bias); algorithm derived score • 95% + alignment based on 2+ reader agreement		2 independent readers with consensus based on discussion (no adjudication required)	
Fibrosis 1-point improvement				
Placebo adjusted percent	19%	20%	19%	20%
Relative risk	3.5	3.6	2.0	2.0
NASH Resolution				
Placebo adjusted percent	21%	26%	32%	61%
Relative risk	11.8	13.5	3.1	5.1
Key liver non-invasive markers				
Liver fat change baseline[2]	-52%	-54%	-52%	-64%
VCTE kPa (chg baseline, placebo adjusted)	-3.7	-3.1	-1.9	-3.6
ProC3 (chg baseline, placebo adjusted)	-25%	-24%	-28%*	-33%*
ALT	-42%	-32%	-38%	-47%

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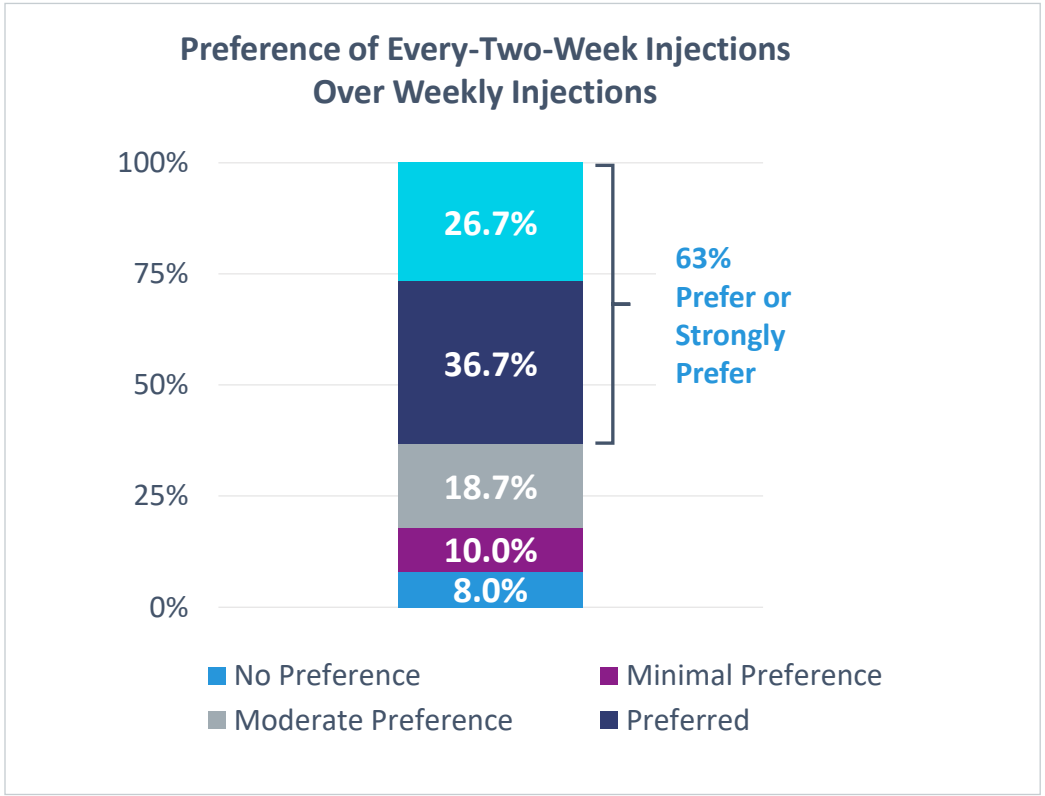
[1]LG cells overexpressing β-klotho and either FGF receptor 1c, 2c, 3c via PERK functional assay. PGZ data is based on MRI-PDFF Analysis Set in subjects with >10% liver fat at baseline
Note: All data regarding third-party molecules on this slide are based on third-party studies and not our own. Conclusions on this slide are not based on head-to-head results
*Calculated values

Comparative Profile of FGF21 Analogs in NASH – Safety/Tolerability

	Pegozafermin (PGZ)		Efruxifermin (EFX)	
	30mg QW	44mg Q2W	28mg	50mg
Tolerability and safety (key terms)				
Diarrhea	17%	9%	35%	33%
Nausea	21%	18%	25%	33%
Frequent bowel	-	-	20%	-
Increased appetite	13%	5%	18%	23%
Injection site erythema	14%	5%	15%	16%
Injection site bruising	-	-	15%	7%

89bio Note: All data regarding third-party molecules on this slide are based on third-party studies and not our own. Conclusions on this slide are not based on head-to-head results

Over 60% of T2D Patients Prefer or Strongly Prefer Every-Two-Week Injections



- Every-two-week dosing provides opportunity for physicians to optimize therapy to patient preference
- Compliance is important in treatment for chronic, asymptomatic diseases

89bio Source: primary market research with 150 people with type 2 diabetes, 2019.