
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): February 15, 2023

89bio, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-39122
(Commission
File Number)

36-4946844
(IRS Employer
Identification No.)

**142 Sansome Street, Second Floor
San Francisco, CA 94104**
(Address of principal executive offices, including zip code)

(415) 432-9270
(Registrant's telephone number, including area code)

Not Applicable
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.001 per share	ETNB	The Nasdaq Global Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 8.01 Other Events.

On February 15, 2023, 89bio, Inc. (the “Company”) will participate in a fireside chat and one-on-one investor meetings at the SVB Securities Global Biopharma Conference. A copy of the corporate presentation that will be referenced during the conference is filed as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated by reference herein.

In the corporate presentation, the Company has updated its pro forma cash balance as of December 31, 2022.

Item 9.01 Financial Statements and Exhibits

(d) *Exhibits.*

EXHIBIT INDEX

Exhibit No.	<u>Description</u>
99.1	89bio, Inc. Corporate Presentation, dated February 2023
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: February 15, 2023

89bio, Inc.

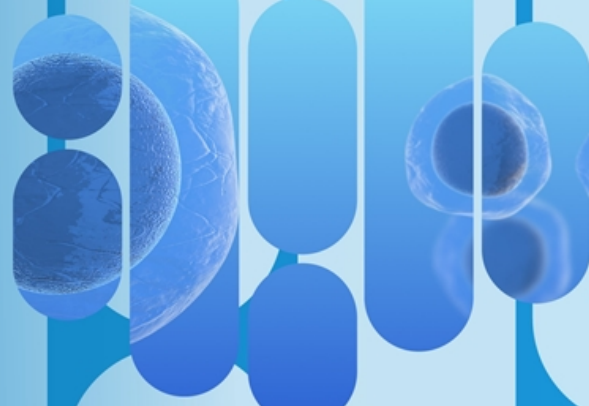
By: /s/ Rohan Palekar
Rohan Palekar
Chief Executive Officer

89bio

Powerful Science
Meaningful Medicines
Changing Lives

Nasdaq: ETNB

February 2023



Disclaimer



Cautionary Note Regarding Forward-Looking Statements

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. 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.

We cannot assure you that we will realize the results, benefits or developments that we expect or anticipate or, even if substantially realized, that they will result in the consequences or affect us or our business in the way expected. Forward-looking statements are not historical facts, and reflect our current views with respect to future events. Given the significant uncertainties, you should evaluate all forward-looking statements made in this presentation in the context of these risks and uncertainties and not place undue reliance on these forward-looking statements as predictions of future events. All forward-looking statements in this presentation apply only as of the date made and are expressly qualified in their entirety by the cautionary statements included in this presentation. We disclaim any intent to publicly update or revise any forward-looking statements to reflect subsequent events or circumstances, except as required by law.

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

Pegozafermin – potential best-in-class cardio-metabolic drug in multiple indications

- Validated broad mechanism of action (FGF21) with potential differentiation on efficacy, tolerability and dosing
- Diversification across two large market opportunities with substantial development and commercial synergies

Nonalcoholic Steatohepatitis (NASH) – Phase 2b topline data expected 1Q23

- Highly competitive profile with Phase 2 results demonstrating robust efficacy across multiple histological and metabolic endpoints with favorable tolerability profile
- Well-powered study with three-panel consensus biopsy reading method to minimize variability

Severe Hypertriglyceridemia (SHTG) – Phase 3 initiation planned in 1H23

- De-risked program given positive Phase 2 data and defined path to approval based on FDA feedback
- Large market opportunity with limited competition in the refractory population

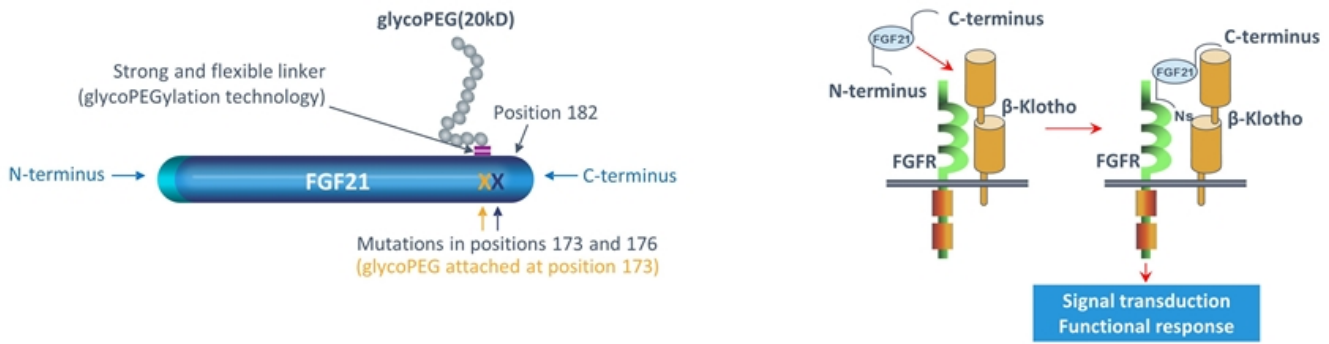
Strong cash position with experienced team

- ~\$191.3 million pro forma¹ cash as of Dec. 31, 2022 and up to \$100 million credit facility with K2 HealthVentures²
- Track record of developing and commercializing successful drugs

89bio ¹ Pro forma cash includes \$25 million drawn under the K2 HealthVentures credit facility net of \$20 million repaid under the SVB term loan facility

² \$25 million of credit facility drawn at closing; remainder subject to achievement of milestones and/or lender approval

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

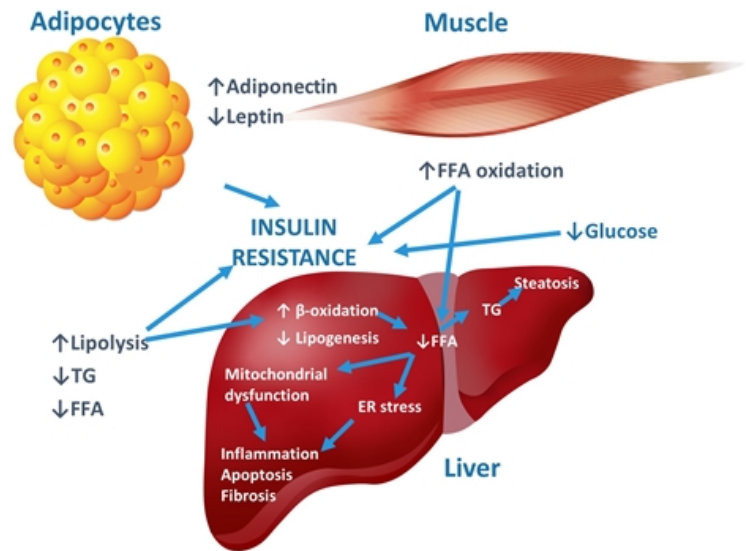


- Proprietary glycoPEGylation technology commercially validated with approved products
- Increases half-life of native FGF21 (<2 hours) to 55-100 hours based on single ascending dose study
- Low nanomolar potency against FGF receptors 1c, 2c, 3c, similar to native FGF21
- Composition of Matter patent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

Proposed Mechanisms of Action of Pegzofermin



- **Adipose tissue**
 - Decrease lipogenesis and release of FFA
 - Improve insulin resistance
 - Increase TG uptake
 - Increase adiponectin
- **Liver**
 - Increase β -oxidation
 - Decrease de novo lipogenesis
 - Decrease FFA / TG
- **Muscle**
 - Increase FFA oxidation

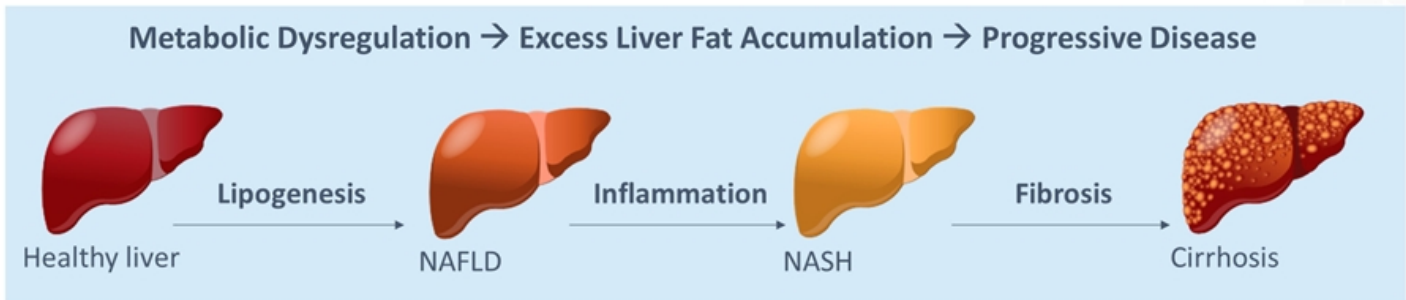


89bio

Opportunity in NASH



NASH is a Serious Liver Condition With Significant Co-Morbidities



- No treatments currently available
- U.S. Prevalence of ~17.5 million patients in 2022
- Fastest growing reason for a liver transplant in the United States

Co-morbidity	Prevalence in NASH population
Hypertriglyceridemia	83%
Obesity	82%
Hyperlipidemia / Dyslipidemia	72%
Metabolic syndrome	71%
Type 2 diabetes	44%

Phase 1b/2a NASH Trial Design



COHORTS 1-6

KEY INCLUSION CRITERIA

- NASH* or phenotypic NASH (PNASH)#
- MRI-PDFF ≥10%

* Patients with biopsy-proven F1-3; #Central obesity plus T2DM or evidence of liver injury;
 • Placebo (n=19) combined across cohorts for analysis; Randomized, pharmacodynamic (PD) and safety analysis set n=81; Study completers n=71; MRI analysis set n=75 (patients with post-baseline MRI)

COHORT 7

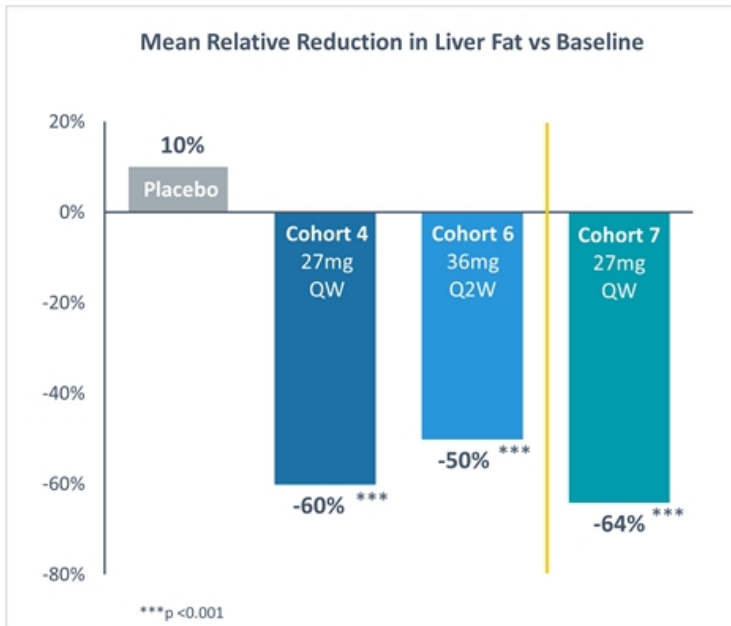
KEY INCLUSION CRITERIA

- F2-F3 NASH; NAS ≥4
- MRI-PDFF ≥8%

• 19/20 (95%) patients completed treatment and had end-of-treatment biopsies; 1 patient discontinued treatment due to withdrawal of consent
 • The three-reader pathologist panel scored 6/19 patients as having F4 fibrosis at baseline (putative F4)

**PGZ was delivered subcutaneously

Pegozafermin Demonstrated Robust Liver Fat Reduction With High Responder Rates

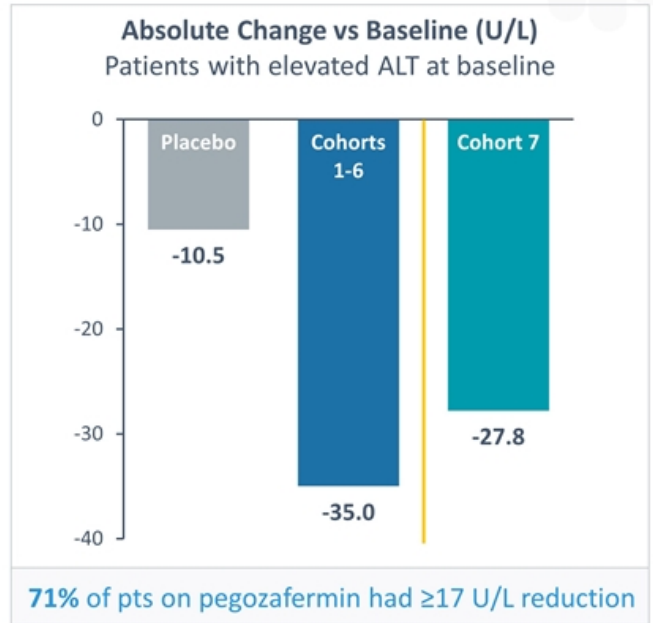
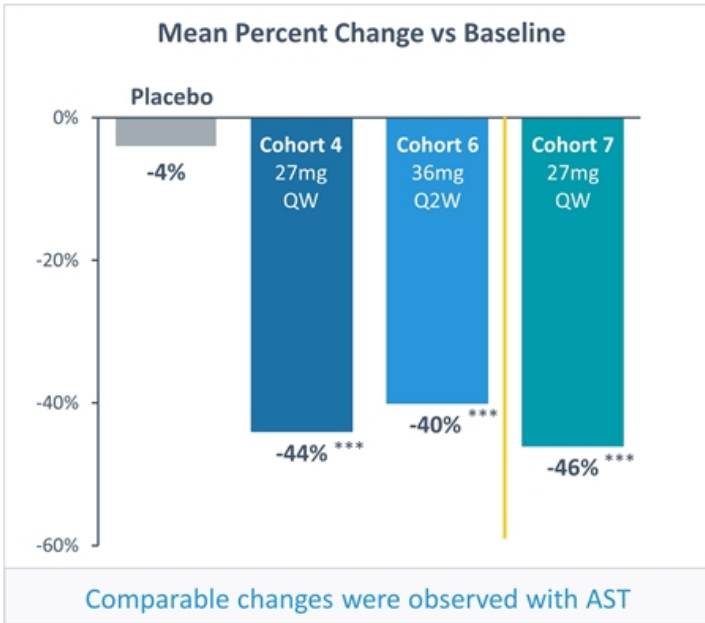


	≥30% Relative Reduction in Liver Fat	≥50% Relative Reduction in Liver Fat
Cohort 4 (27mg QW)	86%	71%
Cohort 6 (36mg QW)	88%	50%
Cohort 7 (27mg QW)	100%	78%



Cohort 4 and Cohort 6: MRI Analysis Set; MMRM LS Mean; p value vs placebo; Data from week 13
 Cohort 7: MRI Analysis Set; p value for change from baseline based on MMRM analysis; Data from week 20

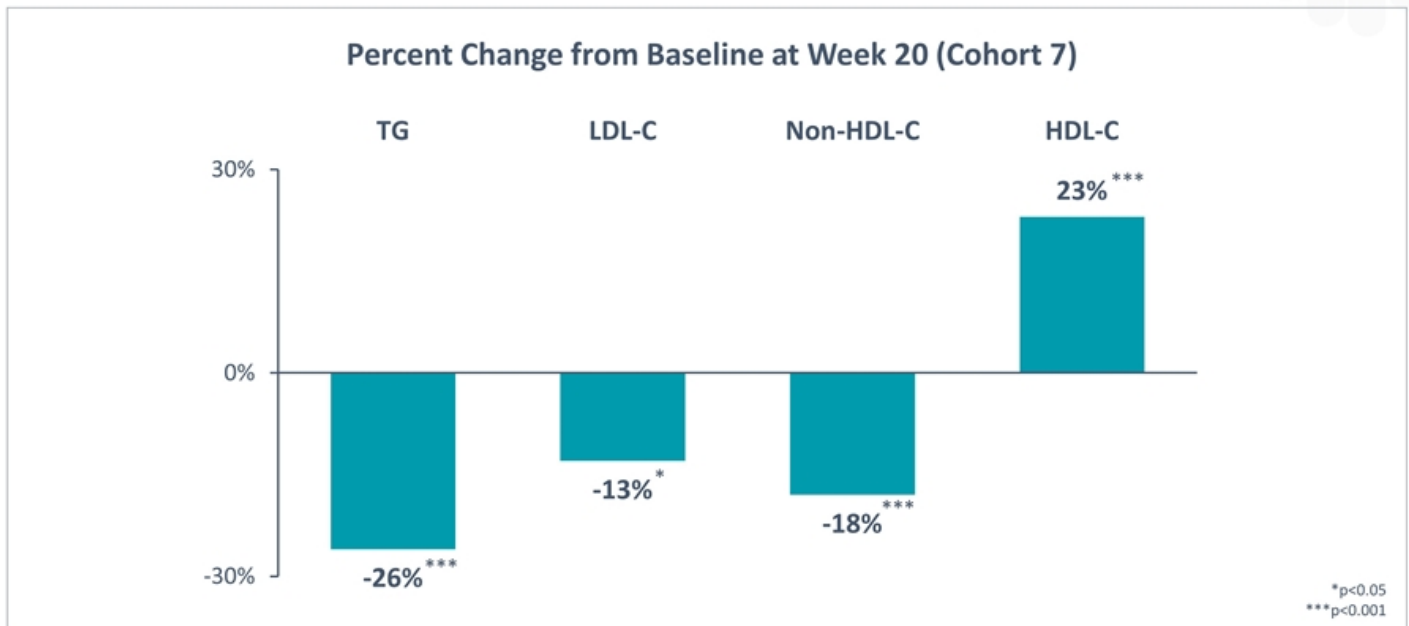
Pegozafermin Significantly Reduced ALT With Greater Reduction Observed in Patients With Elevated Baseline ALT



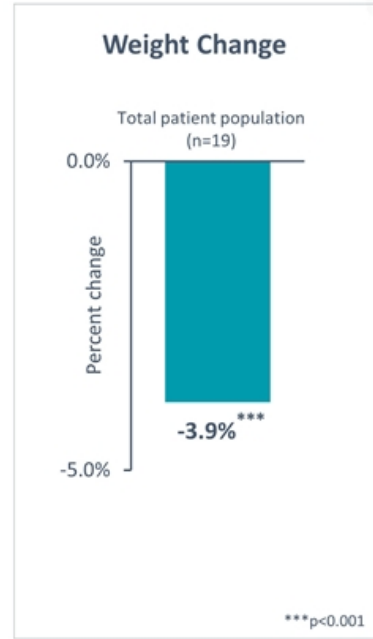
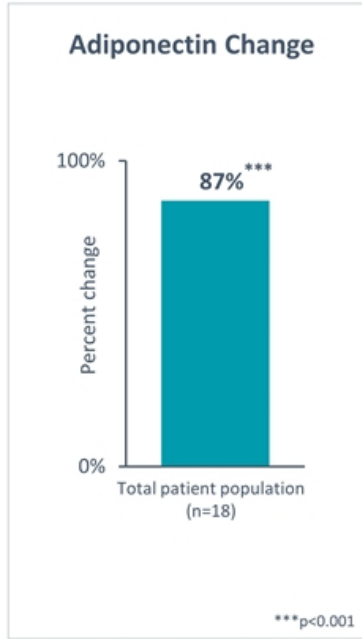
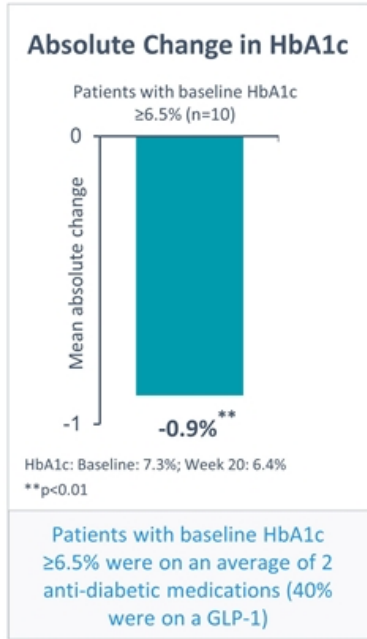
Cohort 4 and 6: Pre-planned sensitivity analysis; MMRM LS Mean at week 13; *** p<0.001 versus placebo
 Cohort 7: p value for change from baseline based on MMRM analysis; Data from week 20; ***p<0.001

Cohorts 1-6: PD Analysis Set in baseline ALT > 45 U/L; Pre planned sensitivity analysis; MMRM LS Mean at Week 13
 Cohort 7: elevated ALT ≥ 30 U/L for women and ≥ 40 U/L for men; Week 20

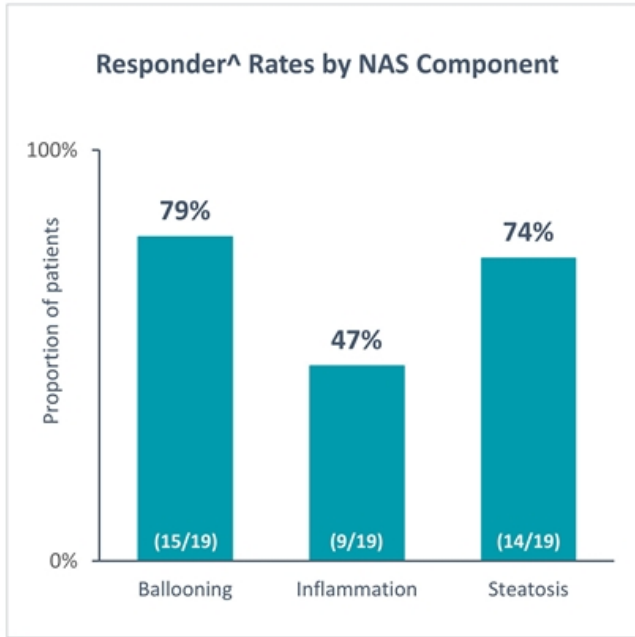
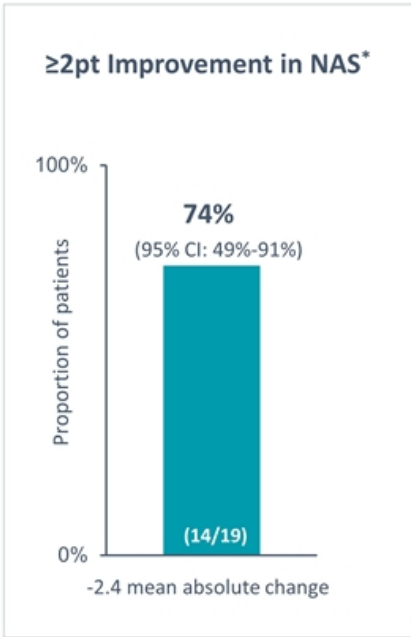
Pegozafermin Demonstrated Clinically Meaningful Improvements in Lipids



Pegozafermin Demonstrated Clinically Meaningful Improvement on HbA1c and Adiponectin With Notable Body Weight Reduction (Cohort 7)



Pegozafermin Robustly Improved NAFLD Activity Score (NAS) and All Components of NAS (Cohort 7)

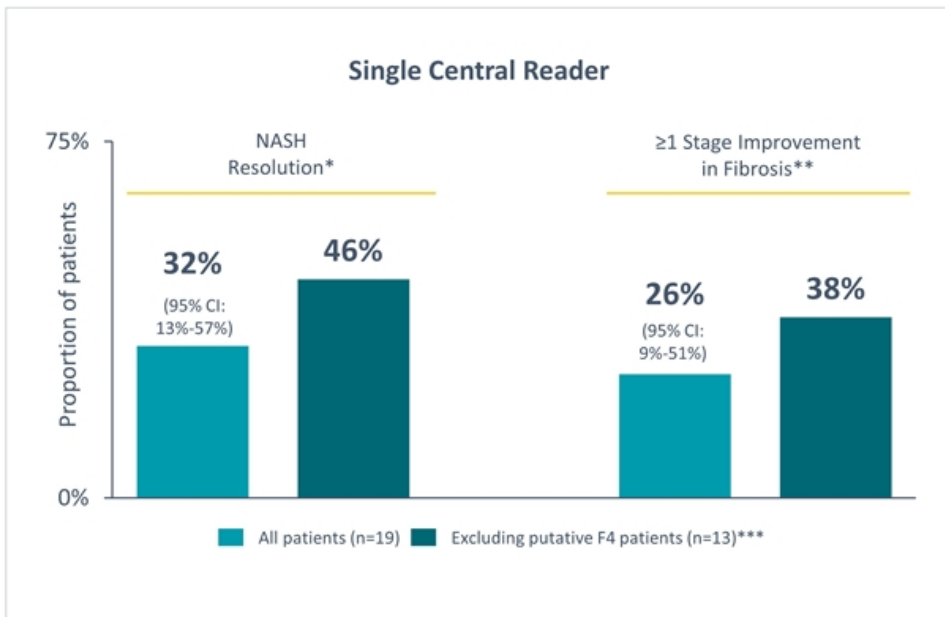


- **63%** of patients had ≥2point improvement in NAS and no worsening of fibrosis* (primary endpoint)
- **100%** of patients had improvement or no change in ballooning and inflammation



* with ≥1 point improvement in ballooning or inflammation
^ ≥1 point change

Pegzofermin Demonstrated Clinically Meaningful Changes on Key Histological Efficacy Endpoints (Cohort 7)



THREE-PANEL READ

- **NASH resolution: up to 47%** (range: 26-47%)
- **Fibrosis improvement: up to 42%** (range: 12-42%)
- **2-point NAS improvement: up to 79%** (range: 68-79%)

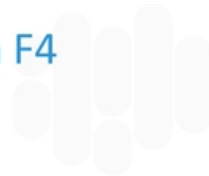


Loomba et al AASLD 2022

*and no worsening of fibrosis **and no worsening of NASH

*** In the post-hoc exploratory analyses, a panel of three additional expert NASH pathologists assessed the same baseline (BL) and end of treatment (EOT) slides that had been evaluated by the central pathologist. Slides from BL and EOT were mixed and the three-reader pathologist panel were blinded to the timepoint; they scored 6/19 patients as having F4 fibrosis at baseline (putative F4)

Pegozafermin Showed Beneficial Effects in Subset of Patients with F4 Stage Fibrosis

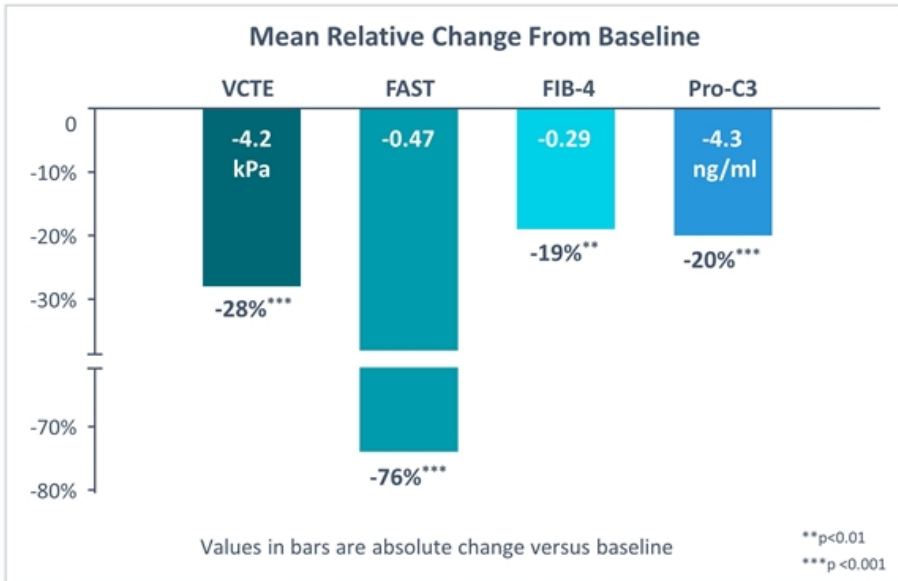


Parameter (Mean or %)	Putative F4 fibrosis (n=6)*
LIVER STEATOSIS	
Relative liver fat reduction by MRI-PDFF (%)	- 71%
MRI-PDFF 30%/50% responders	100%/100%
LIVER TRANSAMINASES	
Percent change in ALT	- 51%
Percent change in AST	- 49%
INSULIN SENSITIVITY	
Percent change in adiponectin	99%
NON-INVASIVE MARKERS OF FIBROSIS	
Change in VCTE score (kPa)/VCTE responders***	-3.8** / 60%**
Change in FAST score/ FAST responders***	-0.5** / 100%**

- Fibrosis improvement ≥ 1 stage without worsening of NASH: **17-57%**
- NASH resolution without worsening of fibrosis: **20-50%**

*Patients assessed with F4 fibrosis by 2+ panel pathologists
 **N=5; one outlier with poor quality measurement was excluded.
 ***VCTE >20% reduction; FAST score ≤ 0.35 .

Pegozafermin Substantially Improved Scores Across Non-Invasive Tests (NITs) Correlated with Advanced Fibrosis



Responder Rate by Clinically Relevant Threshold [†]	
VCTE	72%
FAST	88%
FIB-4	58%
Pro-C3	63%

p value for change from baseline based on MMRM analysis

VCTE: Liver stiffness measure using FibroScan®; FAST score: Liver stiffness (VCTE) and steatosis (CAP) using FibroScan® plus AST; 0-1 scale;

FIB-4 score: Composite serum marker/age measure; Pro-C3: Collagen deposition serum biomarker

VCTE and FAST exclude one outlier with poor quality measurement

[†]VCTE >20% reduction; FAST ≤0.35; FIB-4 ≤1.3; Pro-C3 ≥15% reduction

Pegozafermin - Favorable Safety and Tolerability in NASH Study



- No treatment-related serious adverse events; only 1 treatment-related discontinuation
- Pooled pegozafermin treatment related AEs observed in $\geq 10\%$ of patients were:
 - Increased appetite (13%) vs placebo (0%)
 - Diarrhea (13%) vs placebo (11%)
 - Nausea (12%) vs placebo (11%)
- Most GI AEs were mild and of short duration
- Few mild injection site reactions
- No tremor or hypersensitivity AEs reported
- No adverse effects on blood pressure or heart rate

Comparative Profile of FGF21 Analogs in NASH



	Pegozafermin (PGZ)	Efruxifermin (EFX)
Structure (molecular weight)	<ul style="list-style-type: none"> GlycoPEGylated FGF21 (40 kDa) Structurally different from other monovalent analogs 	<ul style="list-style-type: none"> Fc-fusion FGF21 (92 kDa)
Potency against FGF receptors 1c, 2c, 3c	<ul style="list-style-type: none"> Low nanomolar potency Similar moles of FGF21 delivered with PGZ 30mg and EFX 50mg** 	<ul style="list-style-type: none"> Low nanomolar potency (<i>equivalent to monovalent FGF21 without Fc fusion</i>)***
Efficacy*	<ul style="list-style-type: none"> Similar effects on NAS>2, non-invasive liver markers, metabolic and lipid changes 1-point fibrosis improvement in F2/F3 population was similar 	
Tolerability	<ul style="list-style-type: none"> Lower incidence of GI events No tremors 	<ul style="list-style-type: none"> Higher frequency of GI events Tremors observed in multiple studies
Dosing frequency	<ul style="list-style-type: none"> Weekly and Every Two-Weeks 	<ul style="list-style-type: none"> Weekly
Phase 2b drug product	<ul style="list-style-type: none"> Liquid 	<ul style="list-style-type: none"> Frozen

* based on range including histology assessment from 3-panel read and post-hoc exploratory analyses

** not based on head-to-head comparison; calculation based on assumptions derived from molecular weights and PK properties

*** Akero Therapeutics AASLD 2022 poster, Tillman et al - Efruxifermin, a bivalent Fc-FGF21 analog, demonstrates improved biophysical and pharmacological engagement with live cells compared to monovalent FGF21 analogs

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

Pegozafermin Shows Similar/Superior Effects On Non-Invasive Markers To Other NASH Drugs in Development

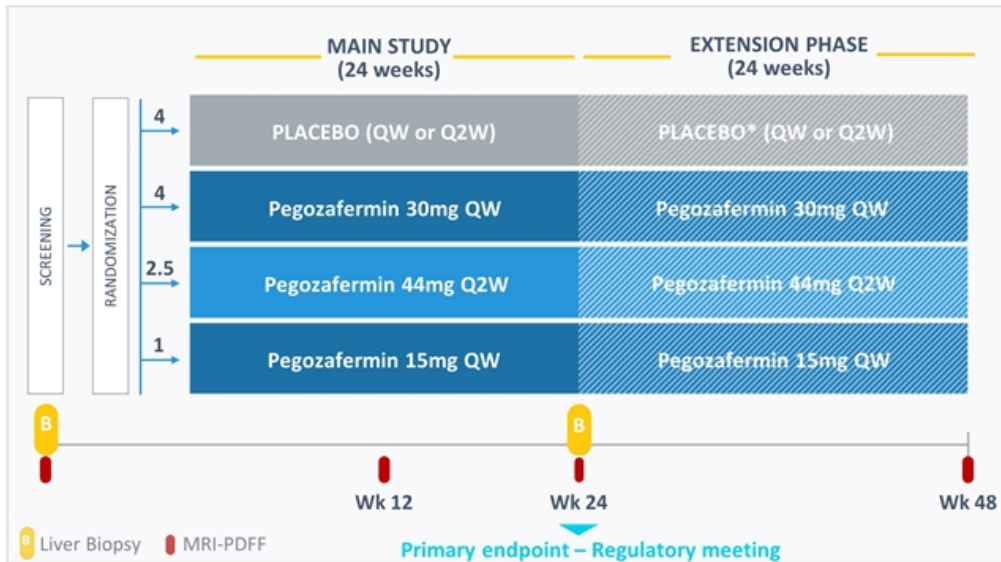
Parameter	PGZ (Week 20)	EFX (Week 24)		Resmetirom (Week 36)
	27mg QW	28mg QW	50mg QW	60 - 100mg QD
LIVER				
MRI-PDFF (% change)	-64%	-52%	-64%	-40%
MRI-PDFF (50% responder)	78%	63%	77%	N/A
ALT (%)	-46%	-38%	-47%	-31%
Liver stiffness by VCTE - (kPa)	-4.2	-2.6	-4.3	N/A
Pro-C3 (µg/L)	-4.3	-5.1	-5.2	-2.2
Adiponectin (%)	88%	69%*	88%*	28%
METABOLIC				
Weight (kg)	-3.7	-0.2	-2.6	-0.6
HbA1c ≥6.5% or T2DM (%)	-0.9%	-0.5%	-0.5%	0.0%
LIPIDS				
Triglycerides (%)	-26%	-25%	-29%	-15.4%
LDL-C (%)	-13%	-8%	-8%	-11.2%
Non-HDL-C (%)	-18%	-13%	-13%	N/A



* EFX data are reported from the 16-week phase 2a BALANCED trial

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

Phase 2b (ENLIVEN) NASH Trial Design



KEY INCLUSION CRITERIA

- F2-F3 NASH; NAS ≥ 4

SELECTED KEY ENDPOINTS

- Fibrosis Improvement
- NASH Resolution
- Key metabolic endpoints

BIOPSY READING

- Three-panel consensus read for baseline and end of treatment biopsies

The primary analysis will include patients who met histologic entry criteria [F2/F3 patients and NAS ≥ 4] based on the three-panel consensus read of biopsies at baseline. This three-panel consensus read was instituted after receipt of cohort 7 data prior to which biopsy entry criteria was based on a single reader

Key Readthroughs to ENLIVEN Trial Based on Recent Events



Trial design helps reduce/minimize variability

- Large sample size provides robust powering on key dosing arms
- Three-panel consensus reading methodology for baseline and end of treatment biopsies to minimize reader variability

Positive histology results from competitive trials de-risk ENLIVEN study

- Similar geography (N. America), biopsy timepoint and expected patient population to FGF21 HARMONY trial
- Comparable or superior non-invasive data relative to the resmetirom phase 2 trial that translated into positive results in the MAESTRO NASH phase 3 trial

Dose selection optimizes probability of success

- Doses selected based on concentration response analyses
- High dose PGZ (27mg QW) performed similar to high dose EFX (50mg QW) on all key non-invasive markers

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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 glycemic control 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)

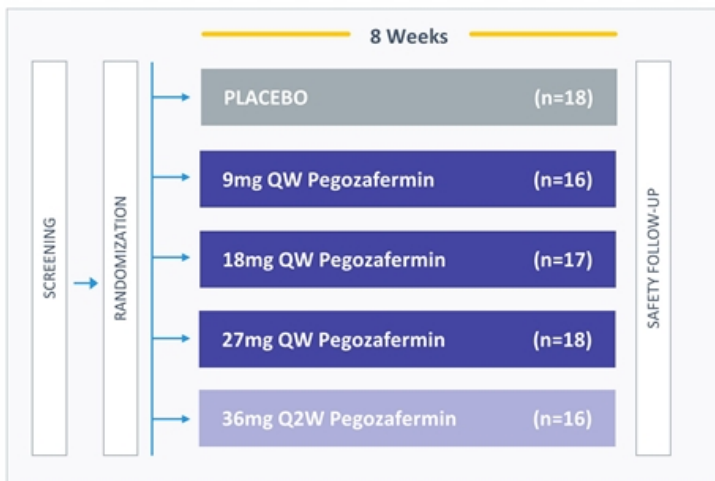
Clinical program substantially de-risked

- Phase 3 design similar to highly 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 given common call points

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 \geq 500mg/dL and \leq 2,000mg/dL
- Background therapy: statins and/or prescription fish oil and/or fibrates OR none

PRIMARY ENDPOINT

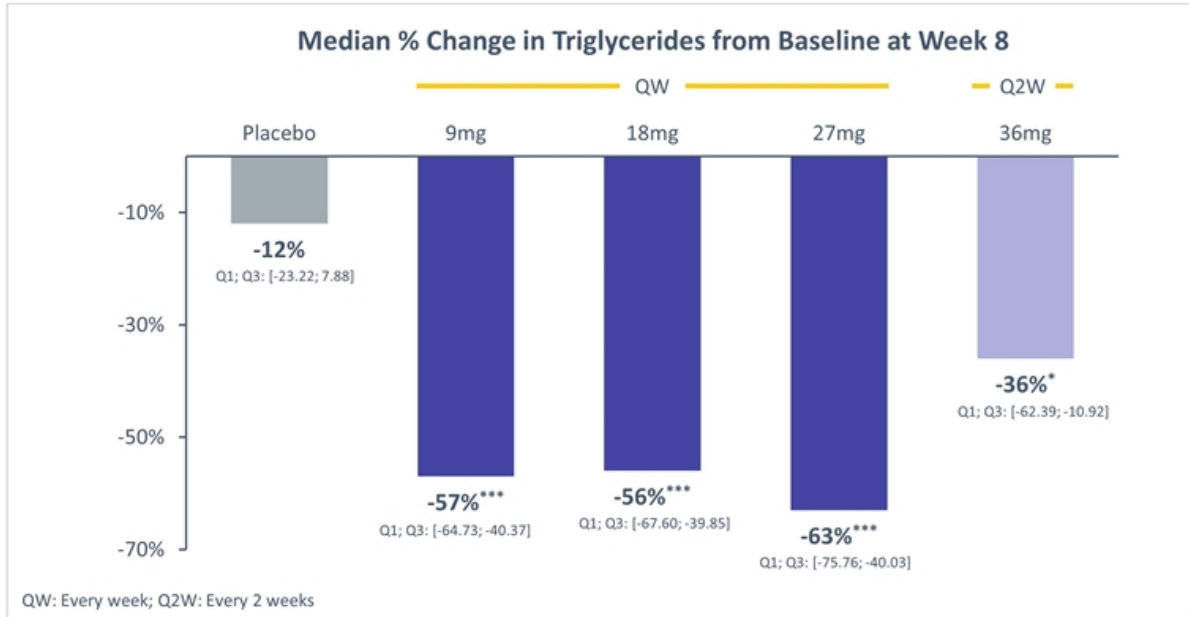
- Primary endpoint: % Change in TGs from baseline

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

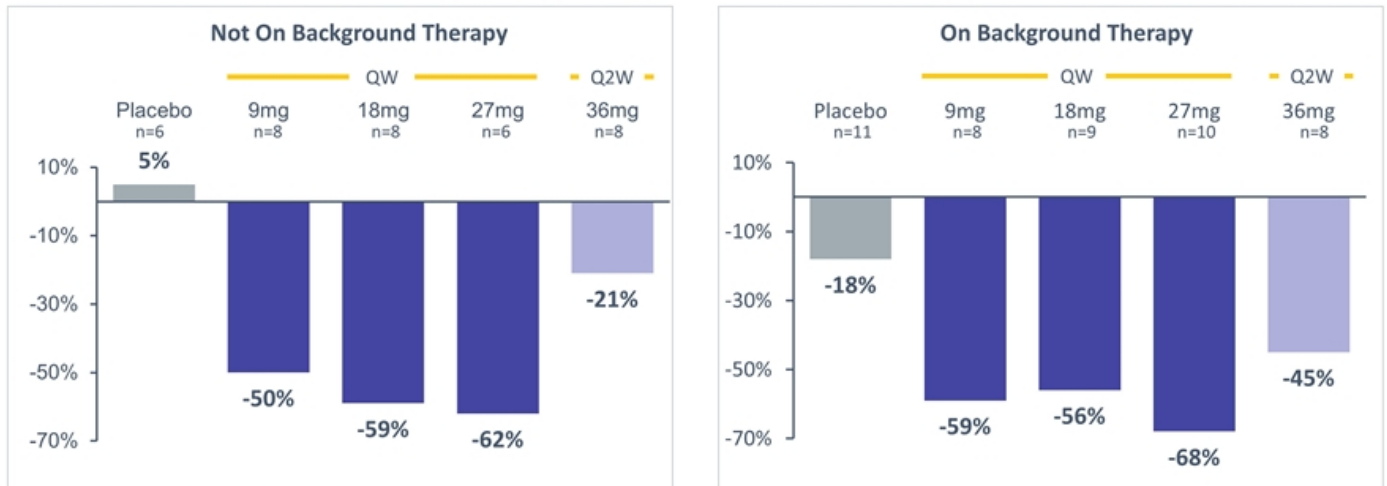


89bio p value vs placebo for change from baseline based on Wilcoxon Rank-Sum Test Full Analysis Set; * p<0.05; ** p<0.01; *** p<0.001 vs. placebo

Pegozafermin Shows Significant Decrease in Triglycerides on Top of Background Therapy



Median % Change in Triglycerides from Baseline at Week 8

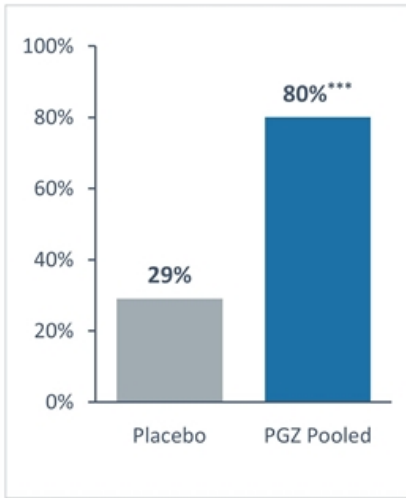


Results are consistent with data from patients on background therapy of statins or statin combos, prescription fish oils, and fibrates

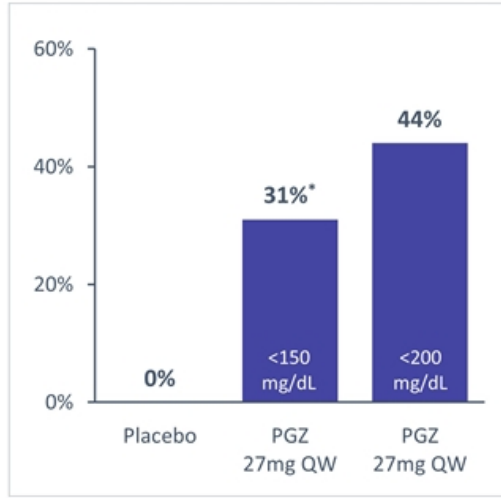
Pegozafermin Shows Significant Decrease in Triglycerides at Different Threshold Levels



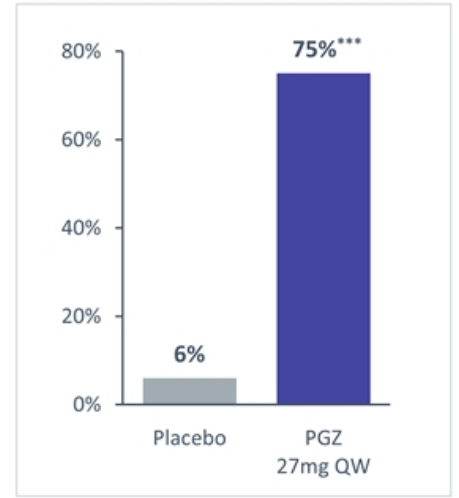
A. Responders (< 500 mg/dL)



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

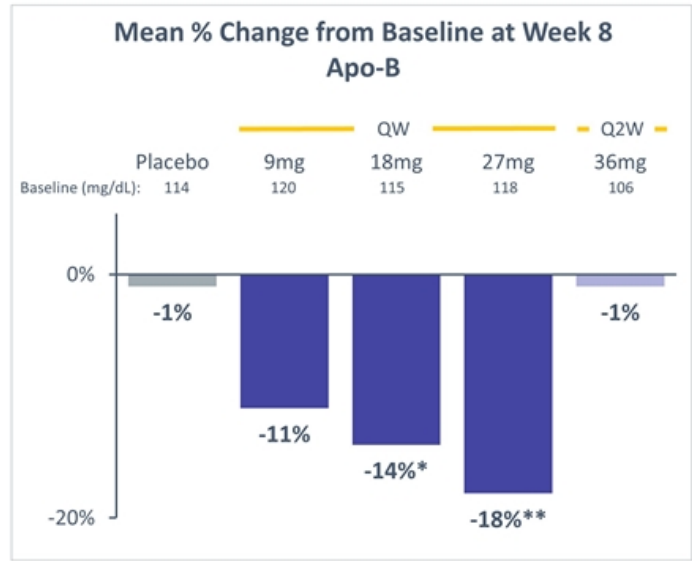
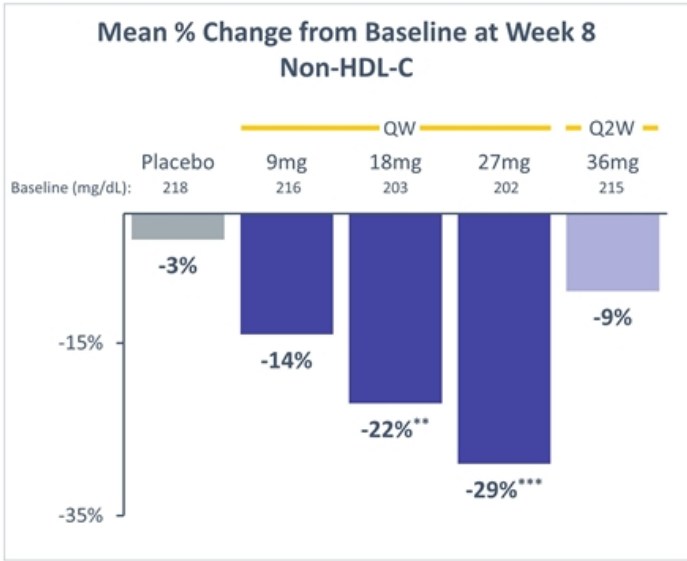


C. TG Reduction ≥50% from baseline



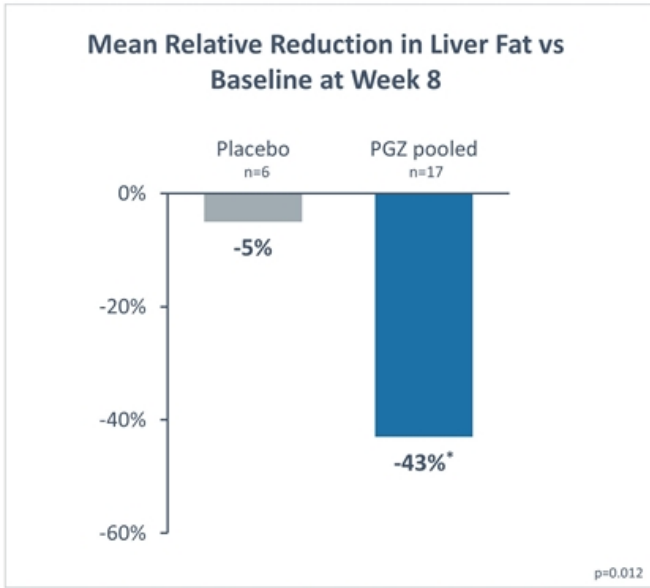
Analysis via unstratified Chi-square Test comparing the individual PGZ groups vs placebo. * p<0.05; ** p<0.01; *** p<0.001 vs. placebo
TG Responders defined as patients who achieve TG <500 mg/dL
Full Analysis Set

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



Pegozafermin Demonstrated Significant Reduction in Liver Fat

Liver Fat Is an Important Potentiator of CV Risk



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

HIGH RESPONDER RATES

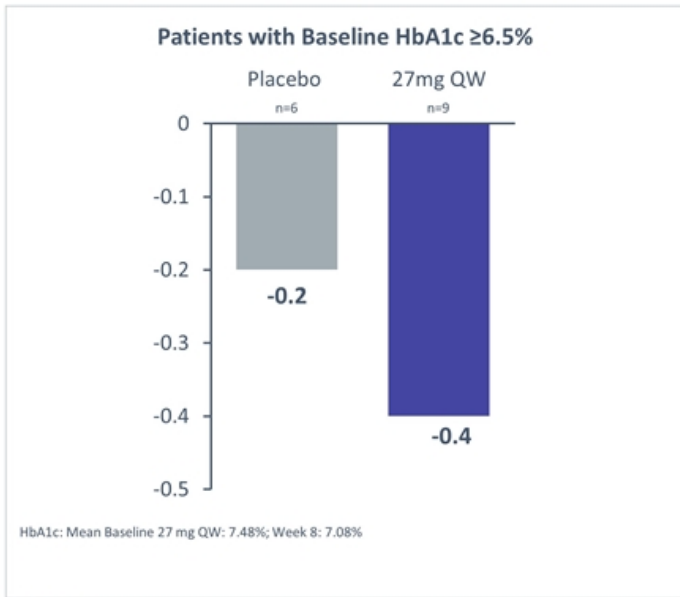
- $\geq 30\%$ Reduction in liver fat: **88%** vs 0% in placebo
- $\geq 50\%$ Reduction in liver fat: **41%** vs 0% in placebo
- **Normalized liver fat: 24%** vs 0% in placebo

Pegozafermin (n=17) and Placebo (n=6)

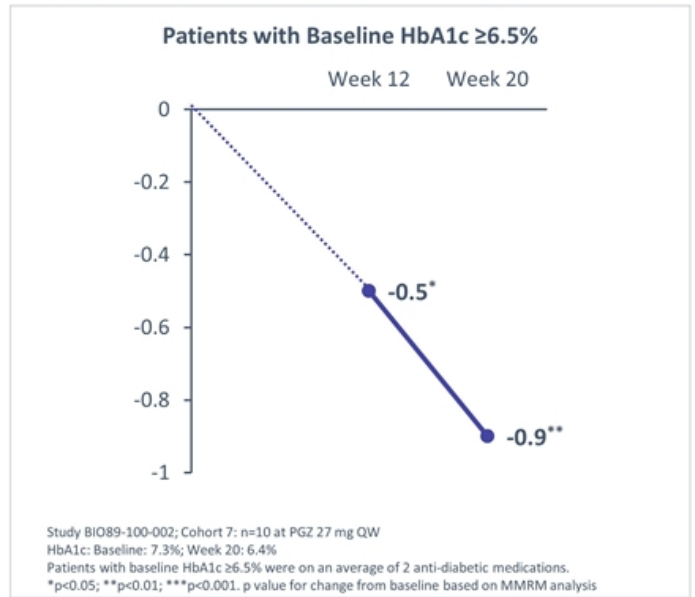
Post-hoc analysis of patients with follow-up MRI-PDFF ≤ 21 days from date of last dose (n=14) resulted in 29% of patient with normalized liver fat and 100% and 50% of patients with mean relative reductions of $\geq 30\%$ and $\geq 50\%$ from baseline, respectively.

Pegozafermin Demonstrated Improvement on HbA1c that May Increase With Longer Treatment

Absolute Change in HbA1c at Week 8



Absolute change in HbA1c in 20-week NASH study



Pegozafermin Demonstrated Favorable Safety/Tolerability in Phase 2 Study

- Pooled pegozafermin treatment related Adverse Events (AEs) observed in $\geq 7.5\%$ 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

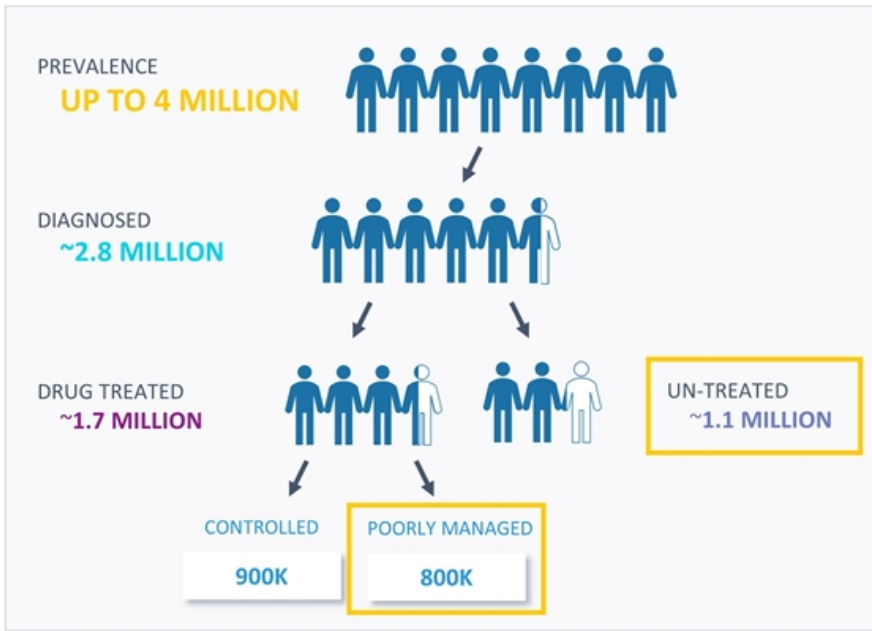
Clinical development

- Trial start-up activities underway – plan to initiate the first SHTG Phase 3 trial in 1H23

Technical Operations

- Developed new pre-filled syringe using liquid formulation for use in planned Phase 3 SHTG trial in 1H23

SHTG Represents a Large Population with High Unmet Need



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




- | | | | | |
|--|---|--|--|--|
| <p>RoA/Dosing</p> <ul style="list-style-type: none"> RoA and dosing were seen as the least influential given familiarity with injectables in T2D | <p>Clinical Outcomes</p> <ul style="list-style-type: none"> Physicians noted that clinical outcomes are not required to drive utilization in SHTG <p><i>Physicians were receptive to using TG as a surrogate endpoint</i></p> | <p>Safety/Tolerability</p> <ul style="list-style-type: none"> Safety and tolerability have a lesser impact on treatment decisions compared to efficacy | <p>Metabolic Endpoints</p> <ul style="list-style-type: none"> Metabolic endpoints were viewed as additive benefits Fatty liver, HbA1c, and weight loss serve as differentiators | <p>TG Endpoints</p> <ul style="list-style-type: none"> TG lowering is the most influential endpoint to drive utilization Significant efficacy improvement over SoC will drive utilization |
|--|---|--|--|--|

- Generally well-tolerated
- 43% mean relative reduction in liver fat¹
- 0.4% absolute reduction in HbA1c²
- 63% reduction in TG from baseline²
- 80% of subjects achieved TG<500mg/dL¹

Physician Enthusiasm for Metabolic Endpoints



Liver fat reduction



Decrease in HbA1c

PEGOZAFERMIN ATTRIBUTES

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¹Pooled pegozafermin data at week 8
²27mg 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



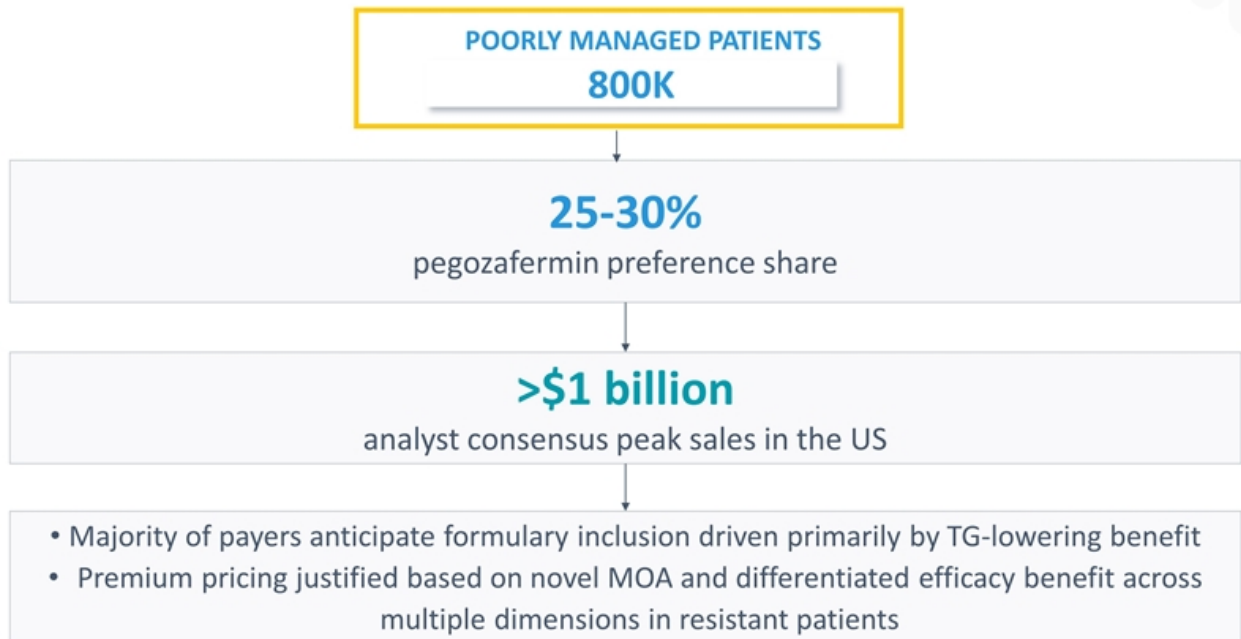
	IN DEVELOPMENT		APPROVED			
	Pegozafermin Potential	APOC3 Potential	Fibrates	Prescription Fish Oils		Statins
				Vascepa	Lovaza	
Triglyceride reduction	✓✓✓	✓✓✓	✓✓	✓	✓✓	✓✓
Liver fat reduction	✓	—	Worsens liver fat	—	—	—
Insulin sensitizing	✓	—	—	—	—	—
Apo-B lowering	✓	✓	—	✓	—	✓
ALT lowering	✓	Transaminase 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.

Significant Peak Sales Opportunity for Pegzofermin in SHTG



Financial Position Summary



**Cash, cash equivalents
and short-term investments**

**~\$191.3M pro forma¹ cash
as of Dec 31, 2022 and up
to \$100M credit facility²**



¹ Pro forma cash includes \$25 million drawn under the K2 HealthVentures credit facility net of \$20 million repaid under the SVB term loan facility

² \$25 million of credit facility drawn at closing; remainder subject to achievement of clinical/regulatory milestones and/or lender approval

Corporate Highlights



Pegozafermin – potential best-in-class cardio-metabolic drug in multiple indications

- Validated broad mechanism of action (FGF21) with potential differentiation on efficacy, tolerability and dosing
- Diversification across two large market opportunities with substantial development and commercial synergies

Nonalcoholic Steatohepatitis (NASH) – Phase 2b topline data expected 1Q23

- Highly competitive profile with Phase 2 results demonstrating robust efficacy across multiple histological and metabolic endpoints with favorable tolerability profile
- Well-powered study with three-panel consensus biopsy reading method to minimize variability

Severe Hypertriglyceridemia (SHTG) – Phase 3 initiation planned in 1H23

- De-risked program given positive Phase 2 data and defined path to approval based on FDA feedback
- Large market opportunity with limited competition in the refractory population

Strong cash position with experienced team

- ~\$191.3 million pro forma¹ cash as of Dec. 31, 2022 and up to \$100 million credit facility with K2 HealthVentures²
- Track record of developing and commercializing successful drugs



¹ Pro forma cash includes \$25 million drawn under the K2 HealthVentures credit facility net of \$20 million repaid under the SVB term loan facility

² \$25 million of credit facility drawn at closing; remainder subject to achievement of milestones and/or lender approval

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Appendix



Experienced Management Team Positions 89bio for Success



Rohan Palekar
CEO

CEO, CCO experience
Commercial, strategy,
and R&D experience

Hank Mansbach, MD
CMO

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

Ryan Martins
CFO

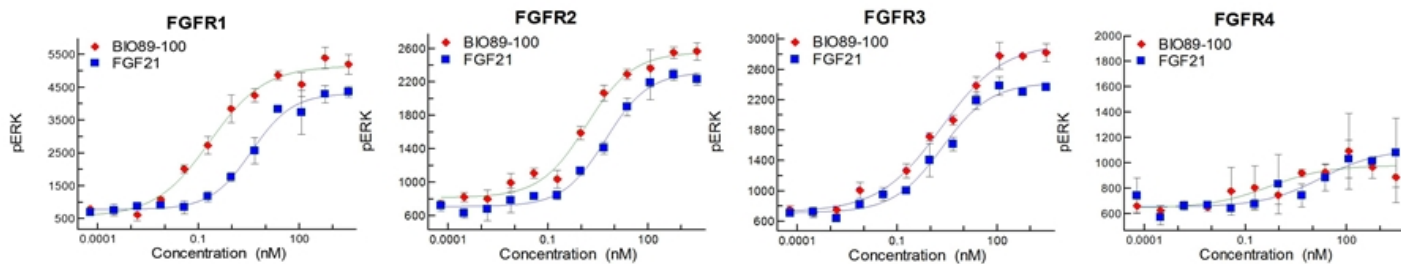
CFO, Strategy/IR,
finance, sell-side
experience

Quoc Le-Nguyen
CTO & Head of Quality

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



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) Mean ± S.D.	EC ₅₀ (nM) 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 EC₅₀ 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

NASH Phase 1b/2a Trial Baseline Characteristics: Consistent Across Cohorts

Parameter Mean or %	Cohorts 1-6 (n=81)	Cohort 7 (n=20)
Age (years)	51.9	58.4
Female	61.7%	75.0%
Weight (kg)	93.6	104.6
BMI (kg/m ²)	34.6	37.0
Type 2 Diabetes	45.7%	85.0%
% F2 / % F3	N/A	35% / 65%
NAS	N/A	5.3
MRI-PDFF (%)	21.3	21.1
ALT (U/L)	41.5	47.1
AST (U/L)	31.0	36.1
Pro-C3 (ng/mL)	11.9	19.3
VCTE (kPA)	7.3	14.3
Triglycerides (mg/dL)	174.3	170.0

Baseline Characteristics – Putative NASH F4 Fibrosis Patients in Cohort 7

Parameter Mean or %	Patients with putative F4 fibrosis (n=6)
Age (years)	60.9
Female	100%
Weight (kg)	92.0
BMI (kg/m ²)	33.9
Type 2 Diabetes (%)	83
MRI-PDFF (%)	18.25
ALT (U/L)	40.8
AST (U/L)	34.5
Fibroscan VCTE (kPa)	18.42
HbA1c (%)	6.6
Triglycerides (mg/dL)	161.1
Albumin (g/dL)	4.33
Platelets (x10 ³ /μL)	188

89bio *Patients assessed with F4 fibrosis by 2+ panel pathologists.

Baseline Characteristics (ENTRIGUE)

Represents an Advanced Population at High Risk for CV Disease



Parameter Mean or %	Placebo (n=18)	PGZ Pooled (n=67)	PGZ 9mg QW (n=16)	PGZ 18mg QW (n=17)	PGZ 27mg QW (n=18)	PGZ 36mg Q2W (n=16)	Total (n=85)
Age (years)	57.5	52.7	54.6	49.2	53.9	53.1	53.7
Male (%)	66.7	77.6	68.8	82.4	72.2	87.5	75.3
BMI (kg/m ²)	33.1	33.1	32.9	32.3	34.2	32.9	33.1
Type 2 Diabetes (%)	61.1	47.8	56.3	35.3	55.6	43.8	50.6
TG (mg/dL)	720	736	722	709	680	840	733
Non-HDL-C (mg/dL)	220	209	216	203	203	215	211
HDL-C (mg/dL)	28	28	31	27	31	25	28
LDL-C (mg/dL)	88	89	92	88	97	80	89
Apo-B (mg/dL)	116	115	120	115	119	106	115
HbA1c ≥6.5% (%)	38.9	44.8	56.3	35.3	50.0	37.5	43.5
ALT (U/L)	29.1	33.9	36.3	36.9	33.0	29.2	32.8
Liver Fat Content (%) (n=24)	16.5 _[n=6]	21.3 _[n=18]	19.8 _[n=3]	18.0 _[n=5]	22.4 _[n=7]	25.5 _[n=3]	20.1 _[n=24]

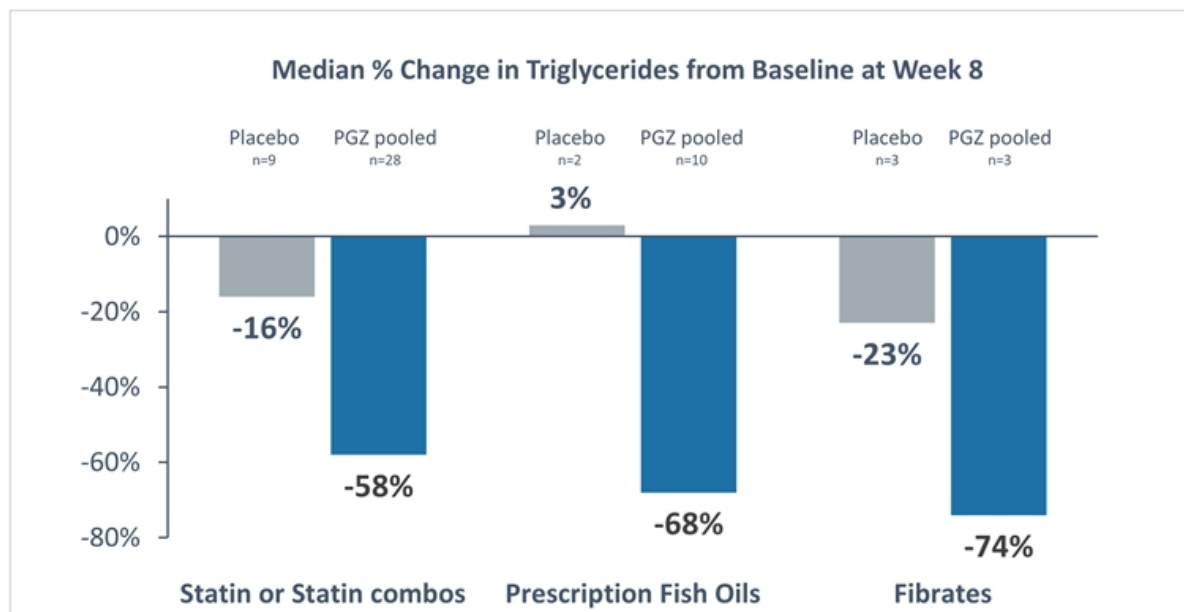
Baseline Characteristics (ENTRIGUE): Approximately 50% on Background Therapy Represents Real World Setting



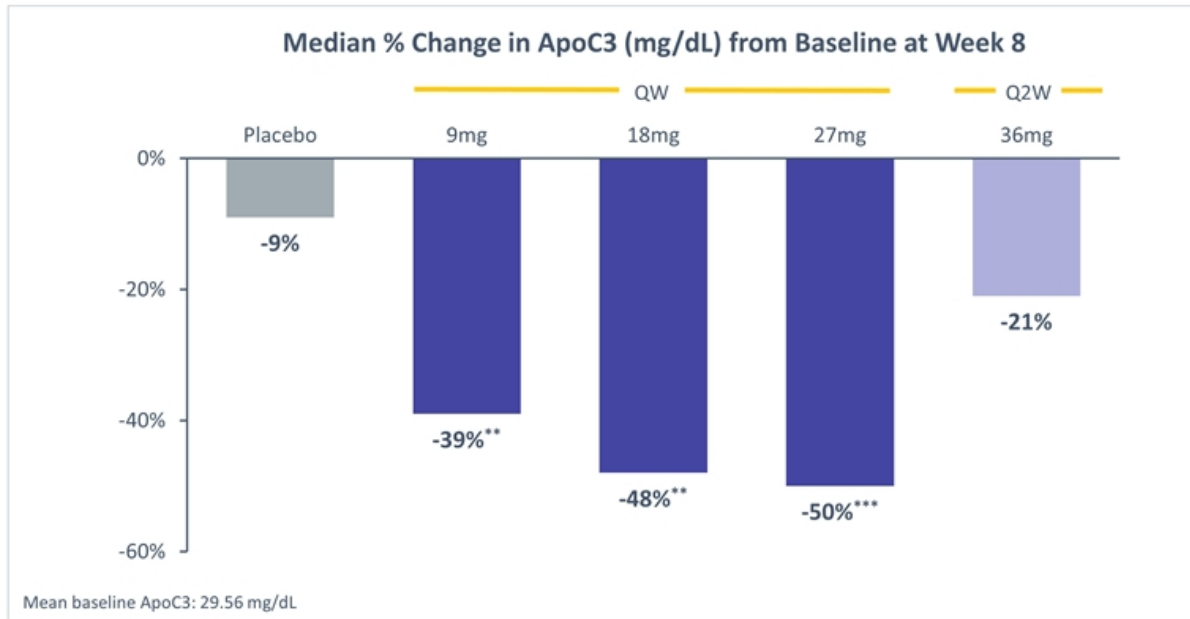
	Placebo (n=18)	PGZ Pooled (n=67)	PGZ 9mg QW (n=16)	PGZ 18mg QW (n=17)	PGZ 27mg QW (n=18)	PGZ 36mg Q2W (n=16)	Total (n=85)
Any background therapy	61%	54%	50%	53%	61%	50%	55%
Statin*	50%	43%	38%	53%	39%	44%	45%
Prescription fish oil	11%	15%	6%	12%	22%	19%	14%
Fibrates	17%	5%	0	0	17%	0	7%
Other	6%	13%	13%	18%	11%	13%	12%

Patients may be on > 1 lipid-modifying therapy
 Background therapy defined as concomitant lipid-modifying therapy
 * 55% of statin use was high intensity statin

Pegozafermin Showed Significant Decrease in Triglycerides on Top of Statins, Prescription Fish Oils and Fibrates (ENTRIGUE)



Pegozafermin Significantly Reduces Apolipoprotein C3 Levels (ENTRIGUE)



89bio 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