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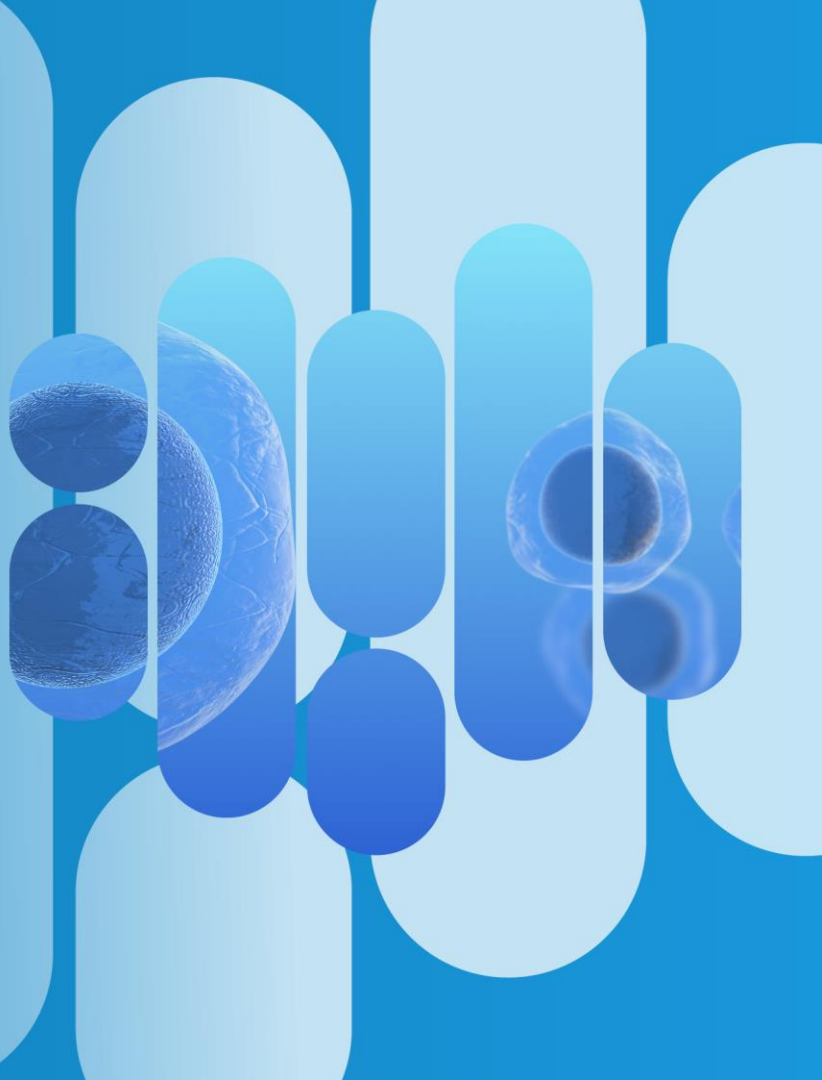
Powerful Science
Meaningful Medicines
Changing Lives



Nasdaq: ETNB

July 2022

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 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.

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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

Pegozafermin – potential important new cardio-metabolic drug; balanced effect on multiple key endpoints

- Impacts a broad spectrum of cardio and metabolic endpoints
- Robust data in two indications with a favorable safety and tolerability profile
- Potential first-to-market FGF21 analog

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

- Highly differentiated based on Phase 2 success across multiple endpoints
- Significant opportunity given large, under-served market with limited competition
- Established regulatory pathway allows efficient clinical development

Nonalcoholic Steatohepatitis (NASH) – Ph. 2b enrollment completion in 3Q22; data expected 1Q23

- FGF21 offers greatest promise in this category – addresses multiple facets of the disease
- Pegozafermin has demonstrated compelling results in clinic

Strong cash position with experienced team

- $200.5M* pro forma cash** as of June 30, 2022
- Track record of developing and commercializing successful drugs and business development at other companies

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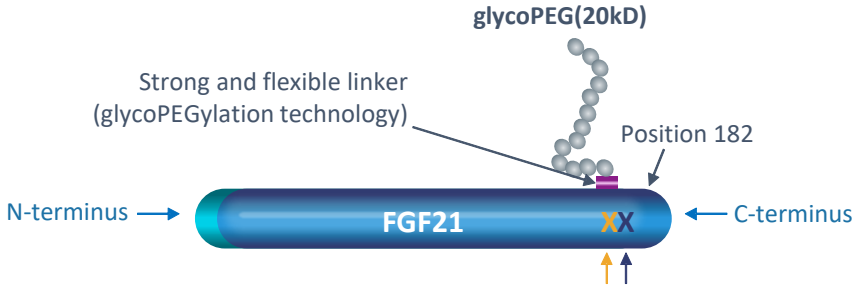
* Includes estimated net proceeds from underwritten public offering of common stock, pre-funded warrants and warrants

** Includes cash and cash equivalents, restricted cash, and short-term available-for-sale securities

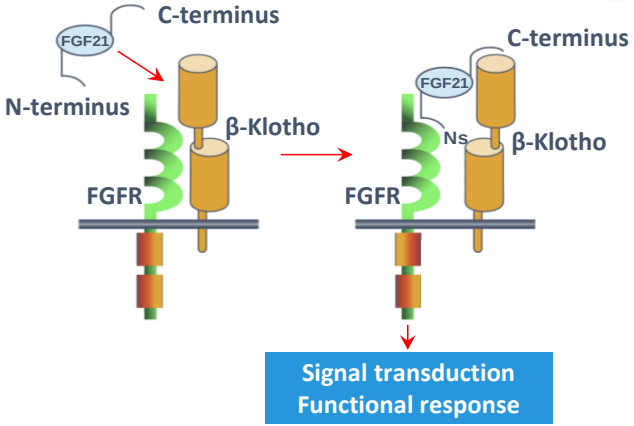
Advancing Pegozafermin in Clinical Development

Indication	Preclinical	Phase 1	Phase 2	Phase 3	Anticipated Milestones
SHTG	Phase 3 trial - Planning				End of Ph. 2 Meeting – 2H22 Phase 3 trial Initiation – 1H23
NASH	Phase 2b trial			ENliven	Complete Enrollment – 3Q22 Topline Data – 1Q23

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



* Composition of matter through 2038



- Proprietary glycoPEGylation technology with site-specific mutations
- 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 Severe Hypertriglyceridemia (SHTG)

SHTG Is a Serious Disease in Need of Better Treatment Options

Patients with SHTG have multiple co-morbidities and significant health risks

- Increased Cardiovascular (CV) Risk
  - Increased risk of CV disease, heart failure and ischemic stroke
  - Increased mortality in patients with CHD
- Increased risk of Acute Pancreatitis
- Increased prevalence of Diabetes

"Most patients with severe hypertriglyceridemia have multiple ASCVD risk factors and are at enhanced risk of developing atherosclerotic disease. This risk is conveyed by atherogenic VLDL plus other factors, such as obesity, metabolic syndrome, and hyperglycemia." [2018 AHA/ACC Guideline For Cholesterol Management]

Average patient in ENTRIGUE study was estimated to have a 23% risk of Major Cardiovascular Events (MACE) over 10 years *(per ACC ASCVD risk estimator)*

- Average patient: no prior CV event, 54 years old, male, white, BP 131/81, total cholesterol 240, HDL 28, LDL 89, diabetic, non-smoker, taking anti-hypertensive medication, no statins or aspirin. Individual results may vary.

ASCVD = Atherosclerotic cardiovascular disease

Pegozafermin – Potential Important New Cardio-Metabolic Drug

SHTG represents a large potential opportunity given pegozafermin's profile

- High unmet needs for better therapeutic options to address broader metabolic comorbidities
- Approved therapies are sub-optimal resulting in large uncontrolled or untreated population

ENTRIGUE results demonstrate compelling and differentiated profile in SHTG

- Significant impact on triglycerides, liver fat, and associated metabolic co-morbidities
- Favorable safety and tolerability profile
- Exceeds target product profile defined by literature, KOLs & treating physicians

Results support advancing to Phase 3 – potential first FGF21 analog to market

- Potentially quicker and efficient regulatory path to approval in SHTG
- Phase 3 initiation expected in 1H23; topline results ~ 2 years from study start

ENTRIGUE results increase confidence in overall pegozafermin program, including NASH

Pegozafermin – Unique and Differentiated Profile in SHTG

Efficacy

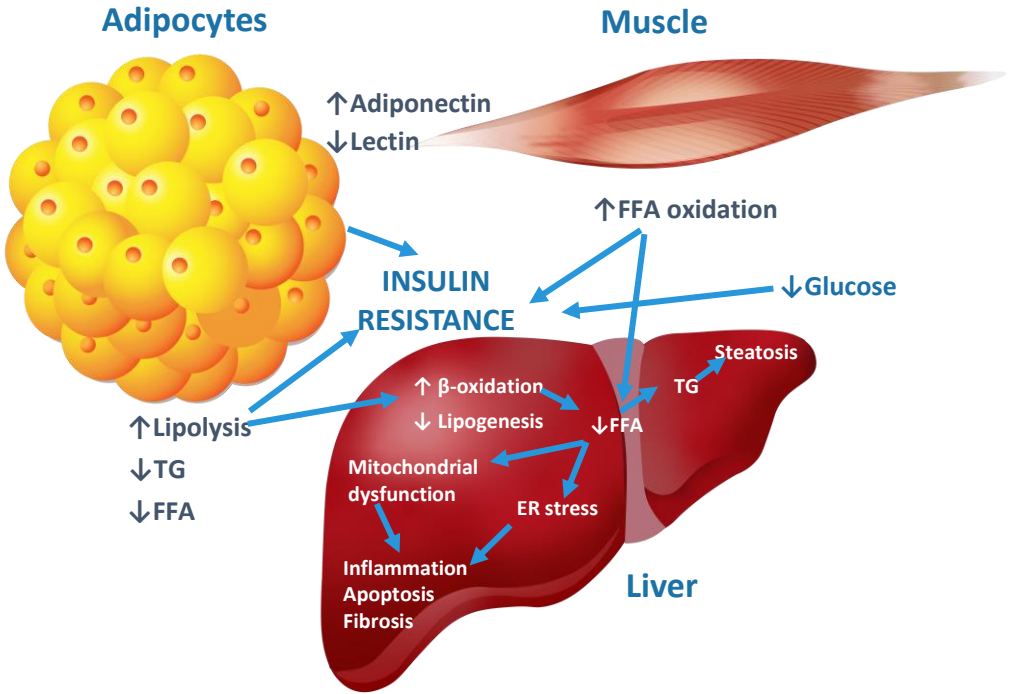
- Significant reduction in triglycerides across all dose groups – up to 63% (27 mg QW)
  - Results consistent in patients with or without background therapy
  - Result consistent across various subgroups (high/low baseline TGs, Type 2 diabetes status)
  - Significant TG normalization rates
- Significant reduction in liver fat and improvements in liver enzymes and glycemic control markers
- Potent reduction in atherogenic lipids (Non HDL-C) and apolipoproteins (Apo-B)

Safety/Tolerability

- Well tolerated at all doses with low incidence of treatment related adverse events (all Grade 1 or 2)

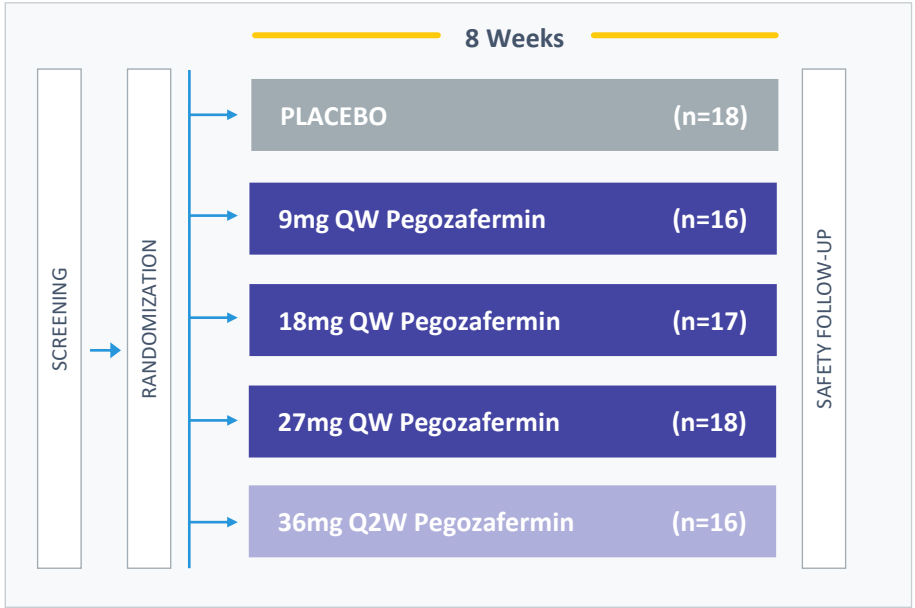
Proposed Mechanisms of Action for Pegozafermin in SHTG

- **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



Stojsavljevic-Shapeski S et al *J Clin Transl Hepatol* 2021;9(1):51-59

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 ≥500 mg/dL and ≤2,000 mg/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

Baseline Characteristics

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**
Body Weight (kg)	98	99	100	97	99	99	**99**
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: 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%**
Statins/statin combo	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%**

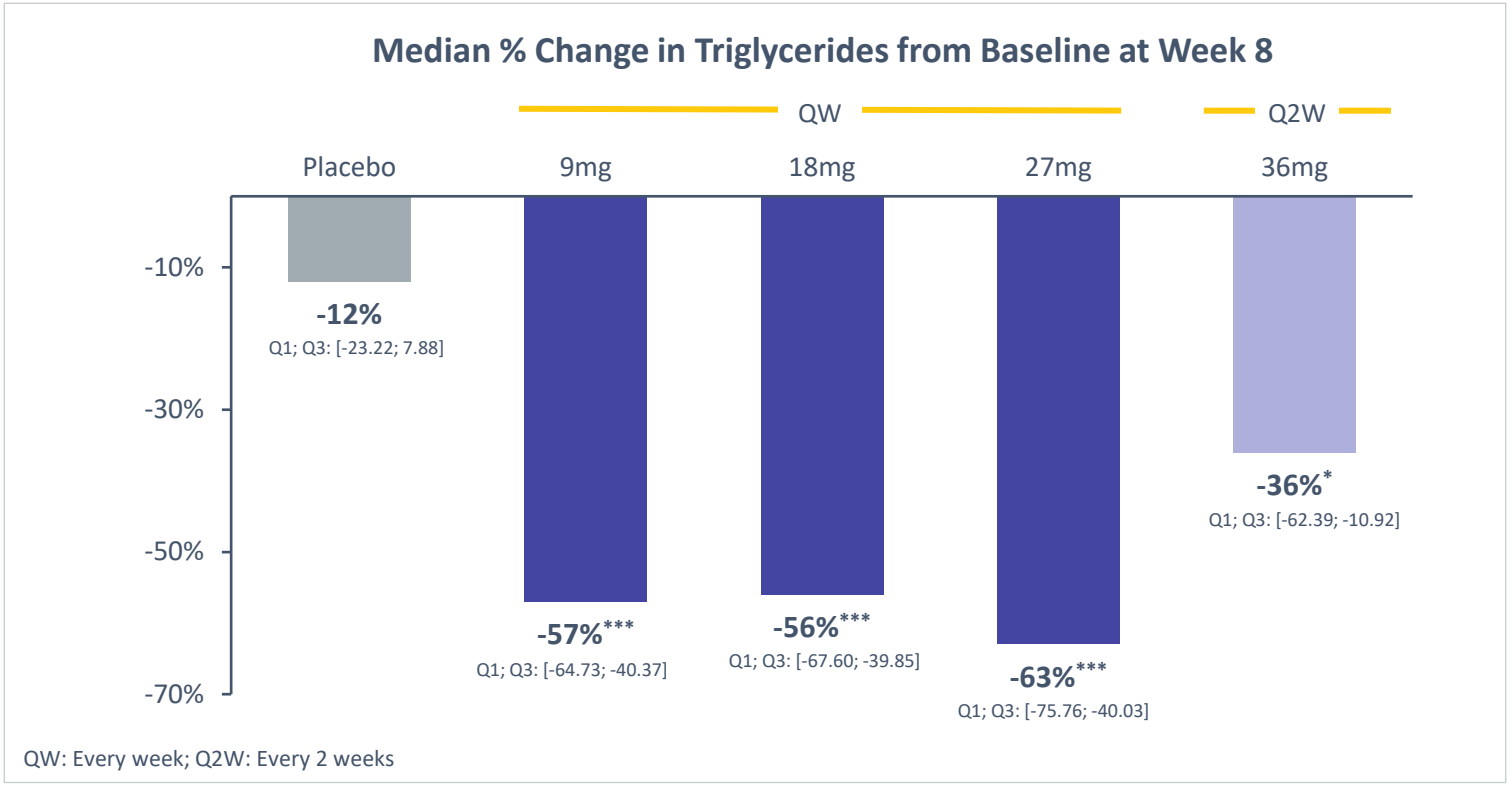
Patients may be on > 1 lipid-modifying therapy

Background therapy defined as concomitant lipid-modifying therapy

Other includes bempedoic acid, ezetimibe alone and ezetimibe as ingredient in combination

Pegozafermin Significantly Reduces Triglycerides across All Dose Groups

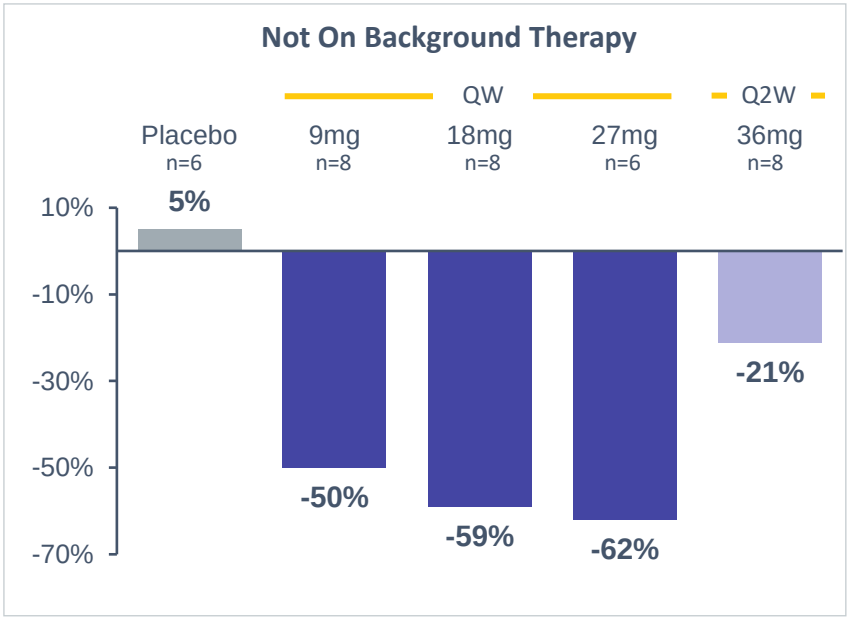
Primary Endpoint

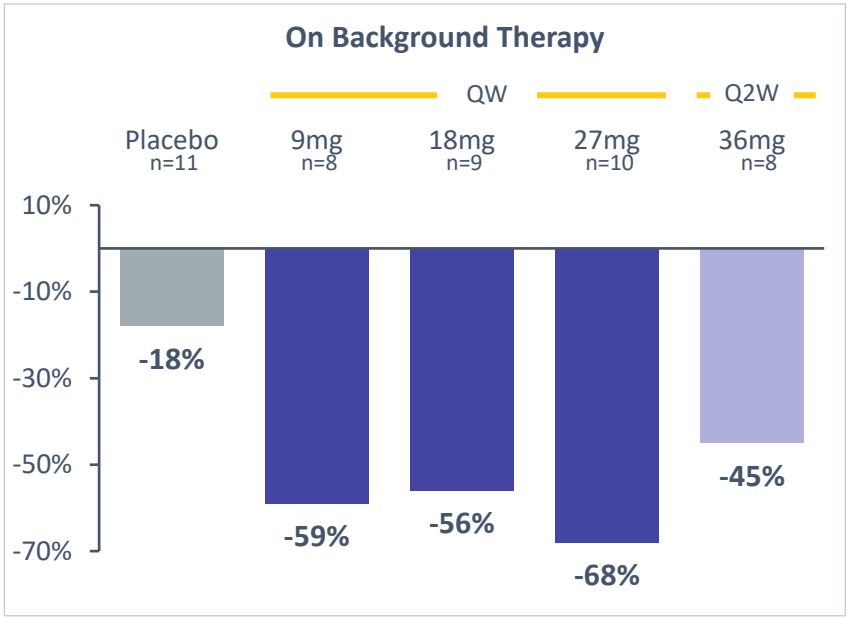


p value vs placebo for change from baseline based on Wilcoxon Rank-Sum Test
Full Analysis Set; * p<0.05; ** p<0.01; *** p<0.001 vs. placebo

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 Consistent and Significant Benefit in Triglyceride Reduction across All Key Subgroups

Median % Change in Triglycerides from Baseline at Week 8

N=(placebo, PGZ pooled)	Placebo	PGZ pooled
Baseline TG ≥750 mg/dL		
Yes (n=4,23)	-20%	-63%
No (n=13,42)	0%	-52%
Type 2 Diabetes		
Yes (n=10,31)	-17%	-62%
No (n=7,34)	-8%	-51%
Region		
US (n=13,43)	-8%	-58%
EU (n=4,22)	-23%	-57%

Similar trends were observed in subgroup analyses based on other baseline characteristics

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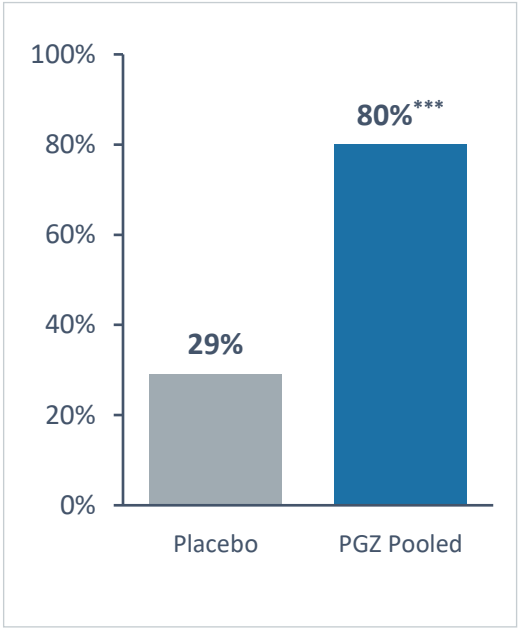
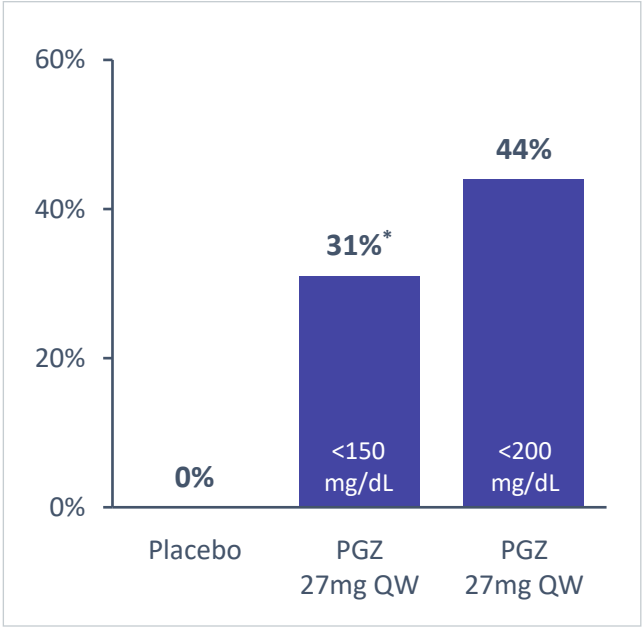
Pegozafermin Shows Significant Decrease in Triglycerides at Different Threshold Levels

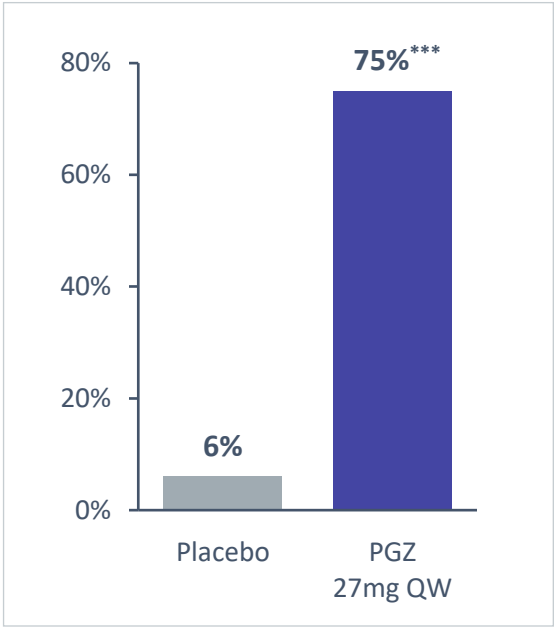
A. Responders (< 500 mg/dL)



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

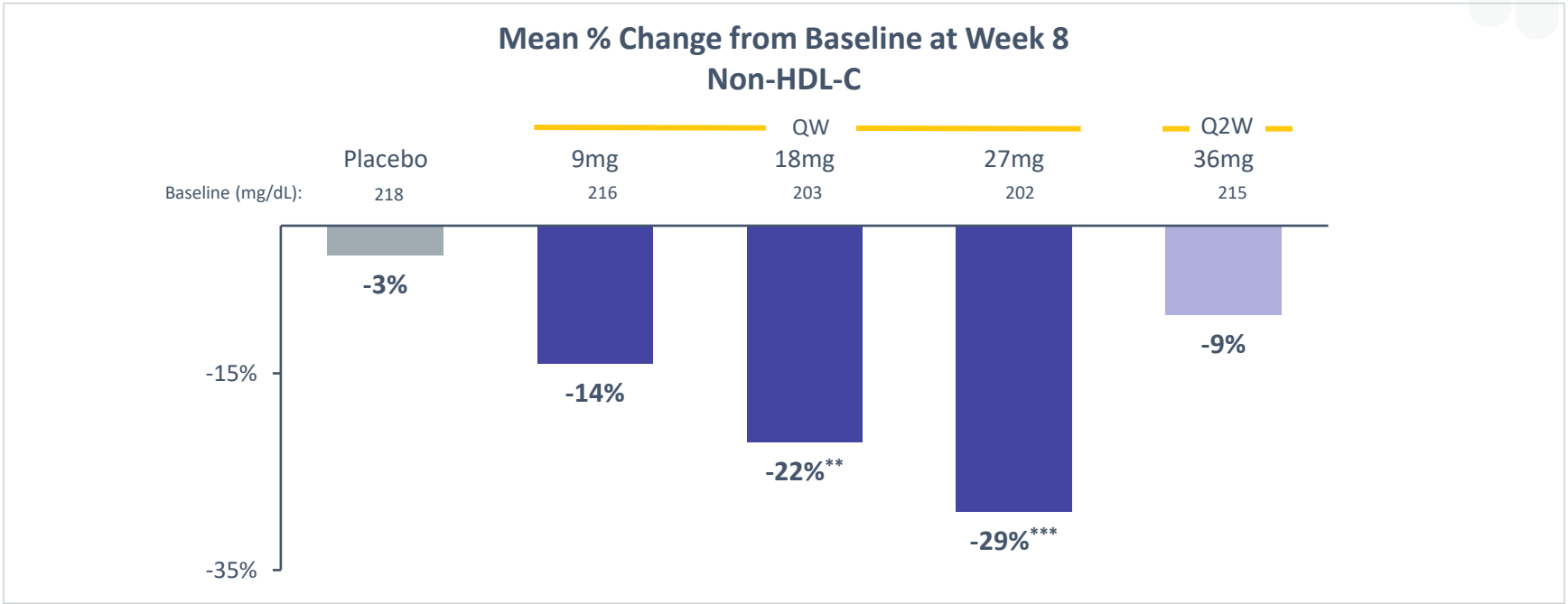


C. TG Reduction ≥50% from baseline



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 – Key Marker of CV Risk



Non-HDL-C measures the cholesterol in atherogenic particles including LDL-C, IDL-C, and VLDL-C and is considered a better measure of CV risk in hypertriglyceridemia ‡

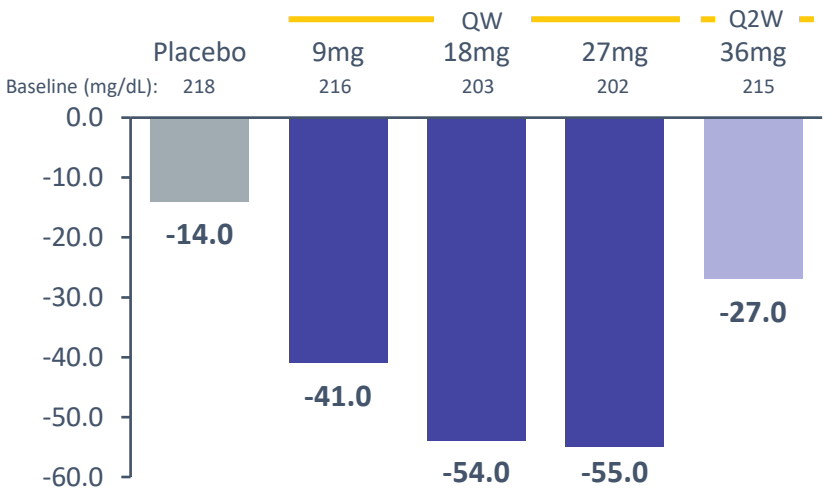
p value vs placebo based on MMRM analysis; Full Analysis Set; * p<0.05; ** p<0.01; *** p<0.001 vs. placebo

‡Behbodikhah J, *Metabolites* 2021.

Pegozafermin Demonstrated Reduction in Absolute Non-HDL-C

Absolute Non-HDL-C Reduction is Associated with MACE Improvement

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



Mean % change in HDL-C: up to 29%

Non-HDL-C reduction of 55 mg/dL is associated with a 25-30% reduction in MI or CV death

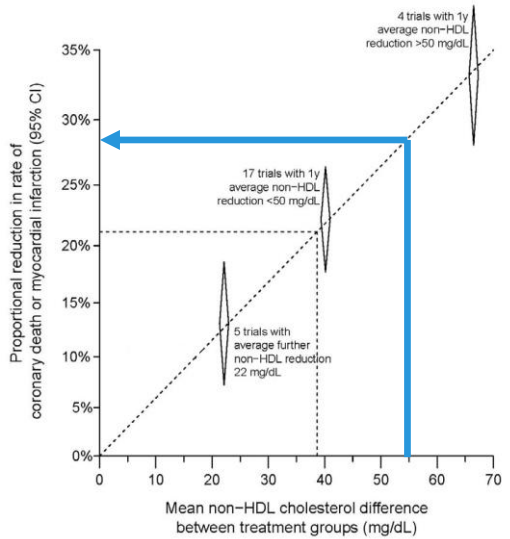


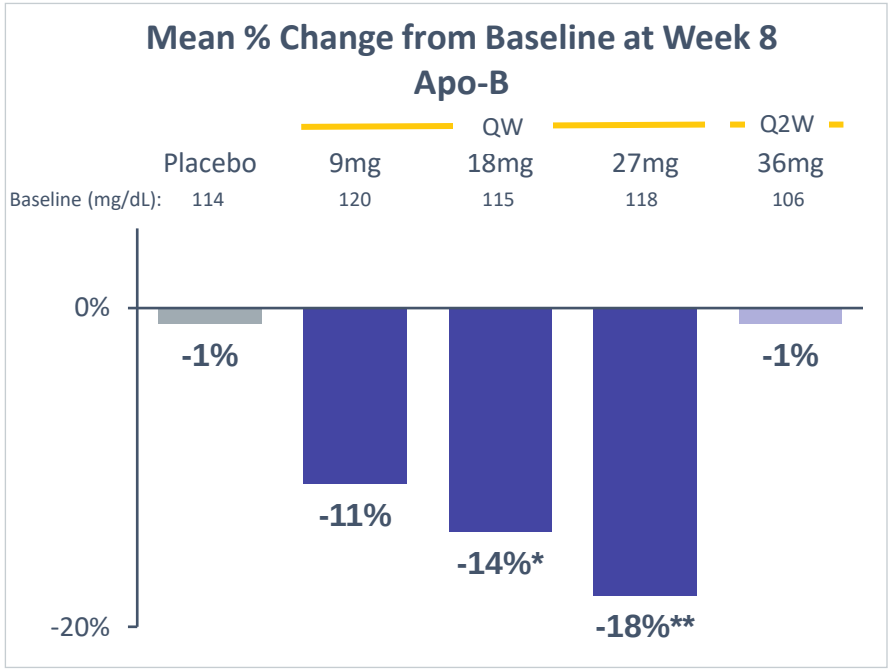
Figure adapted from: The HPS3/TIMI55–REVEAL Collaborative Group, NEJM 2017; 377: 1217-27

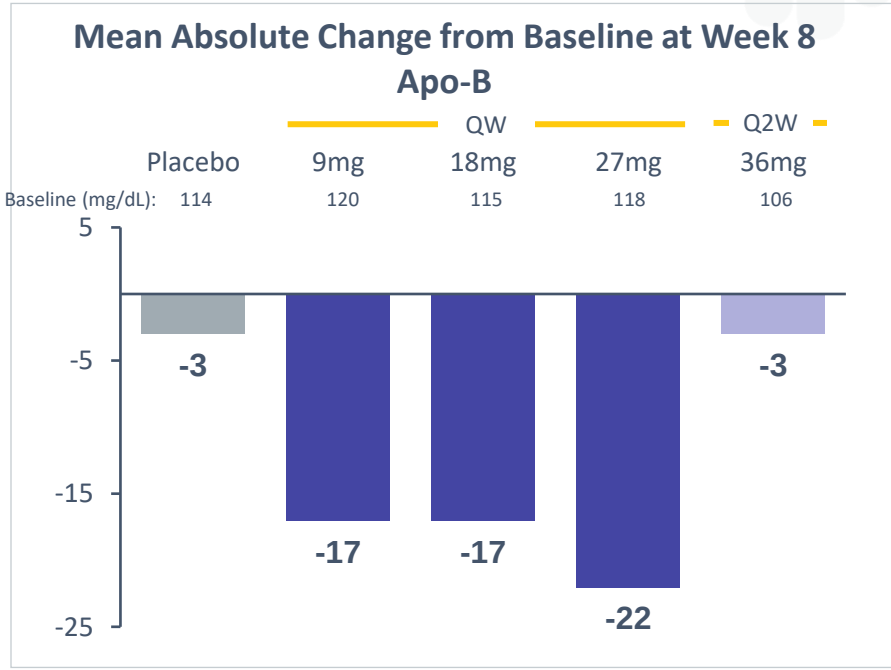
Non-HDL-C reduction of 55 mg/dL is associated with a 25-30% reduction in MI or CV death[†]

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

[†] The HSP3/TIM55-REVEAL Collaboration Group. NEJM, 2017.

Pegozafermin Demonstrated Clinically Meaningful Improvements in Apo-B – Key Marker of CV Risk



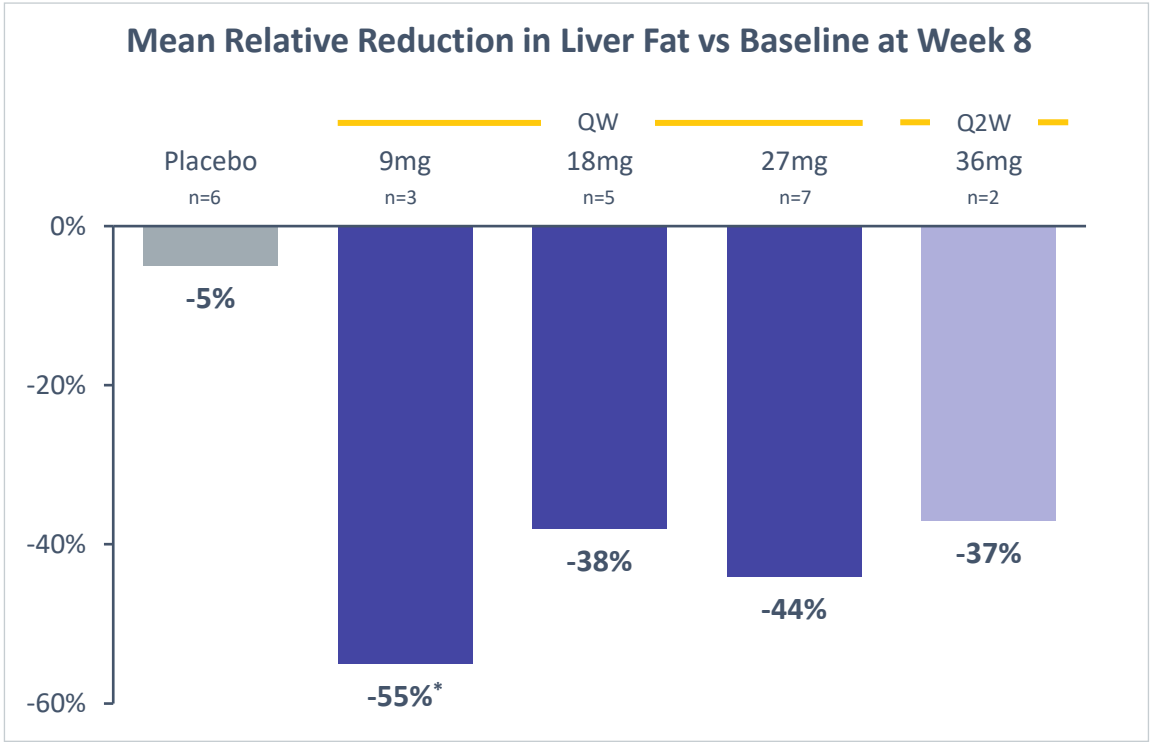


Apo-B is a critical structural protein in atherogenic lipoproteins including LDL-C and is a direct measure of number of atherogenic lipoprotein particles. Apo-B has been proposed as a more accurate indicator of CV risk than LDL-C.[1]

p value vs placebo based on MMRM analysis
Full Analysis Set; * p<0.05; ** p<0.01; *** p<0.001 vs. placebo
[1]Behbodikhah J, Metabolites 2021; Ference B, *JAMA* 2019.

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

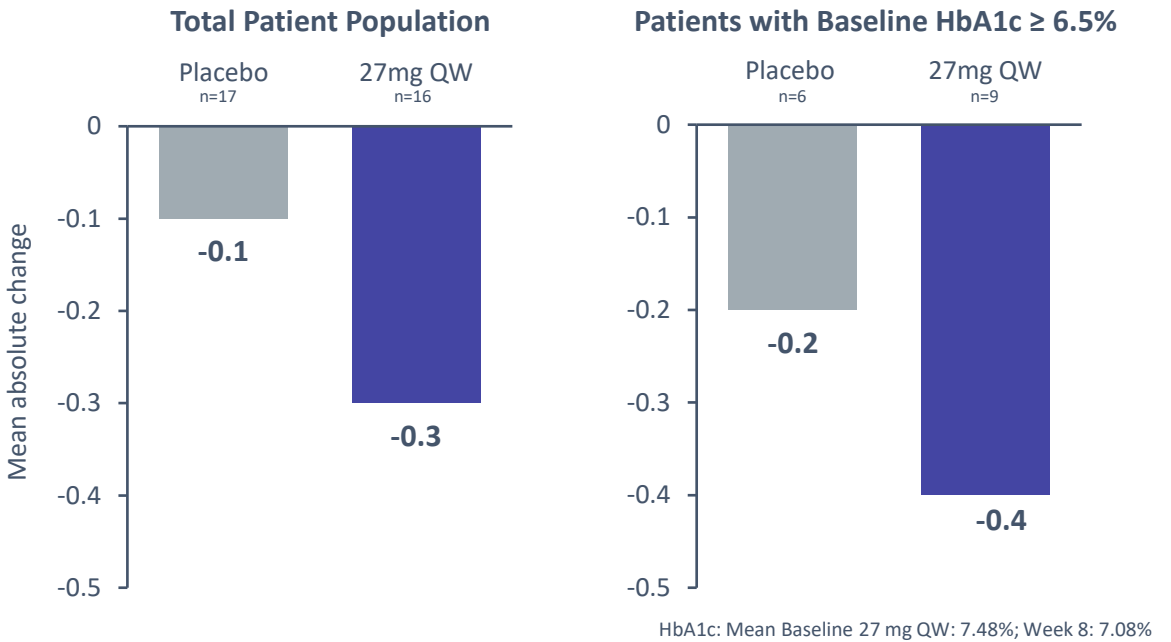
HIGH RESPONDER RATES

- **≥ 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.

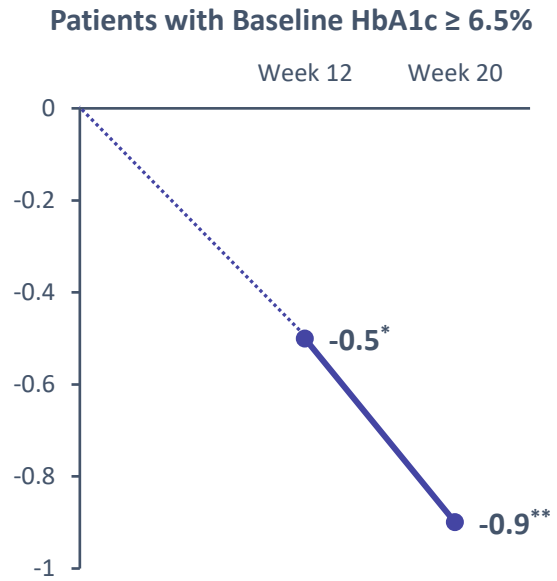
Pegozafermin Demonstrated Improvement on HbA1c that May Increase with Longer Treatment

Absolute Change in HbA1c at Week 8 in ENTRIGUE



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

Absolute change in HbA1c in 20-week NASH study



Study BIO89-100-002; Cohort 7: n=10 at PGZ 27 mg QW
HbA1c: Baseline: 7.3%; Week 20: 6.4%
Patients with baseline HbA1c ≥ 6.5% were on an average of 2 anti-diabetic medications.
*p<0.05; **p<0.01; ***p<0.001. p value for change from baseline based on MMRM analysis

89bio Full analysis set; MMRM analysis

Pegozafermin Was Well Tolerated Across Doses

Safety profile consistent with prior studies

Low Incidence of Treatment-Related AEs in ≥ 7.5% of Pooled Pegozafermin Group

Preferred Term	Placebo (n=18)	PGZ Pooled (n=67)	PGZ 9mg QW (n=12)	PGZ 18mg QW (n=21)	PGZ 27mg QW (n=18)	PGZ 36mg Q2W (n=16)
Nausea	0	10%	0%	5%	22%	13%
Diarrhea	0	9%	17%	5%	17%	13%
Injection site reaction	0	9%	8%	10%	6%	13%

All AEs were Grade 1 or 2; No Grade 3 or higher TEAEs reported. No tremor or transaminase elevation AEs reported.

	Placebo (n=18)	PGZ Pooled (n=67)	PGZ 9mg QW (n=12)	PGZ 18mg QW (n=21)	PGZ 27mg QW (n=18)	PGZ 36mg Q2W (n=16)
Serious adverse event (unrelated)	0	1*	0	0	1	0
Treatment emergent discontinuations (related/unrelated)	0	2^/2	0	0	2^/2	0

*Unrelated SAE of Grade 2 hypertension; patient withdrew
^Grade 2 abdominal cramps (1) and Grade 2 nausea/vomiting (1)
Safety Analysis Set; patients reported on as treated basis

Pegozafermin has Differentiated Profile Compared with Other TG-Lowering Drugs

	IN DEVELOPMENT		APPROVED			
	Pegozafermin Potential	APOC3	Fibrates	Prescription Fish Oils		Statins
				Vascepa	Lovaza	
Triglyceride reduction	✓✓✓	✓✓✓	✓✓	✓	✓✓	✓✓
Liver fat reduction	✓	–	Worsens liver fat	–	–	–
Insulin sensitizing	✓	–	–	–	–	–
Cholesterol lowering	✓ (non-HDL-C)	✓ (non-HDL-C)	Worsens LDL-C	–	Worsens LDL-C	✓
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.

Proposed Clinical Development

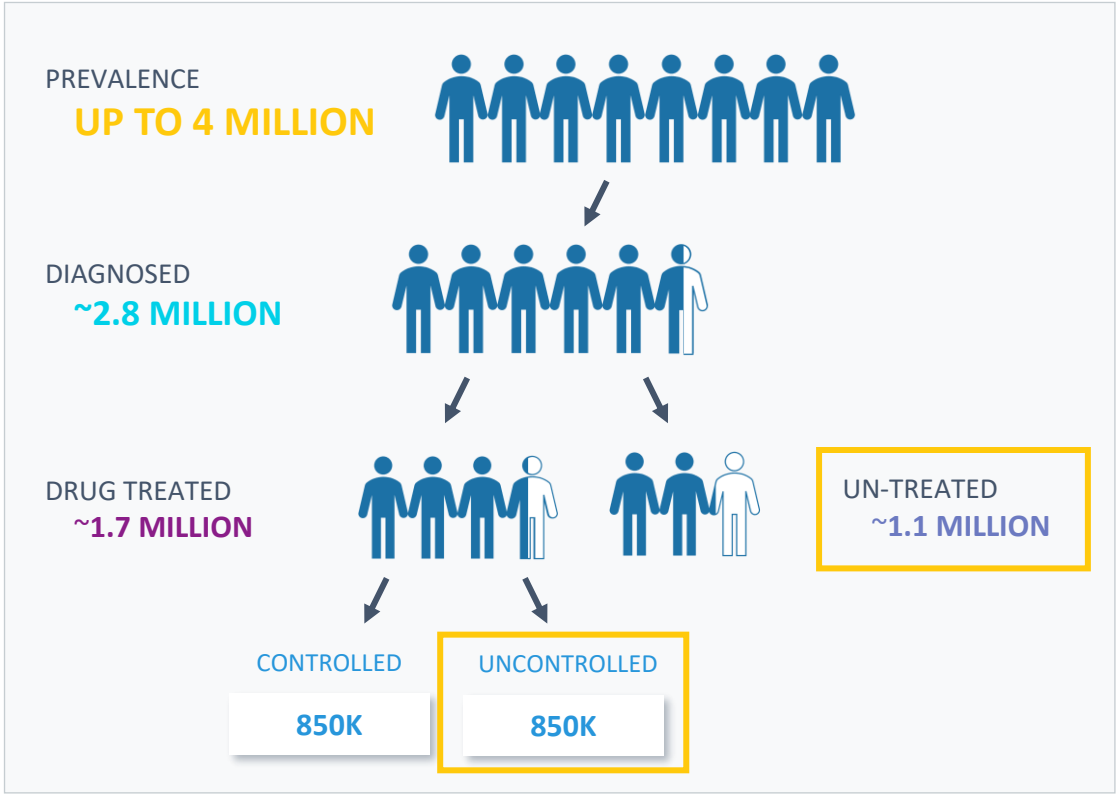
Regulatory

- Seek full approval using endpoint of triglyceride lowering (based on FDA precedent)
- Propose study duration and study size based on prior precedents for approved drugs
- Discuss safety database requirements for approval
- End of Phase 2 meeting planned for 2H22

Clinical Development

- Conduct single pivotal Phase 3 trial in SHTG
  - Trial initiation expected in 1H23; Topline results expected in 1H25
- Consider additional studies to meet safety database requirements per FDA discussions
  - Potential trial(s) in other hypertriglyceridemia patient populations
  - Leverage safety data from NASH studies

SHTG Represents a Large Population with High Unmet Needs



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 TARGET POPULATION

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Opportunity in NASH

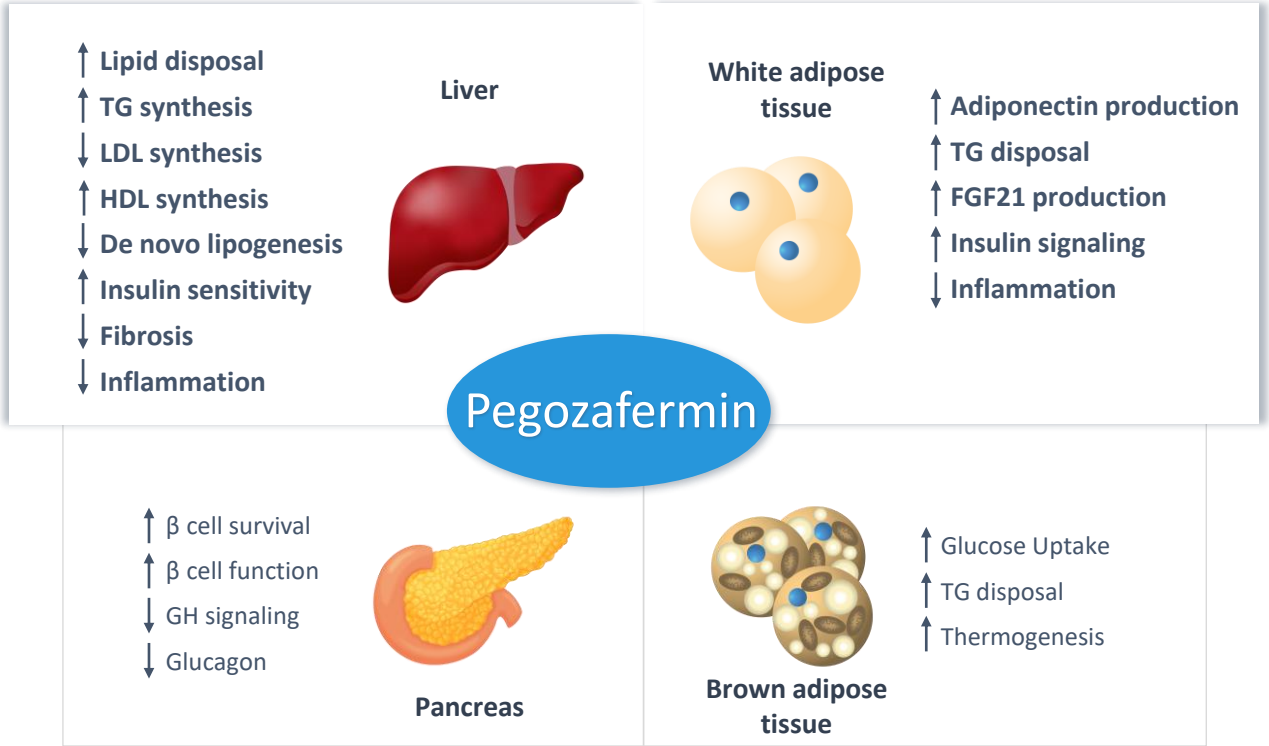
NASH is a Serious Liver Condition With Significant Co-Morbidities

Metabolic Dysregulation → Excess Liver Fat Accumulation → Progressive Disease

- No treatments currently available
- 16.5 million cases projected to grow to 27 million cases by 2030
- Expected to become the leading cause of liver transplant

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

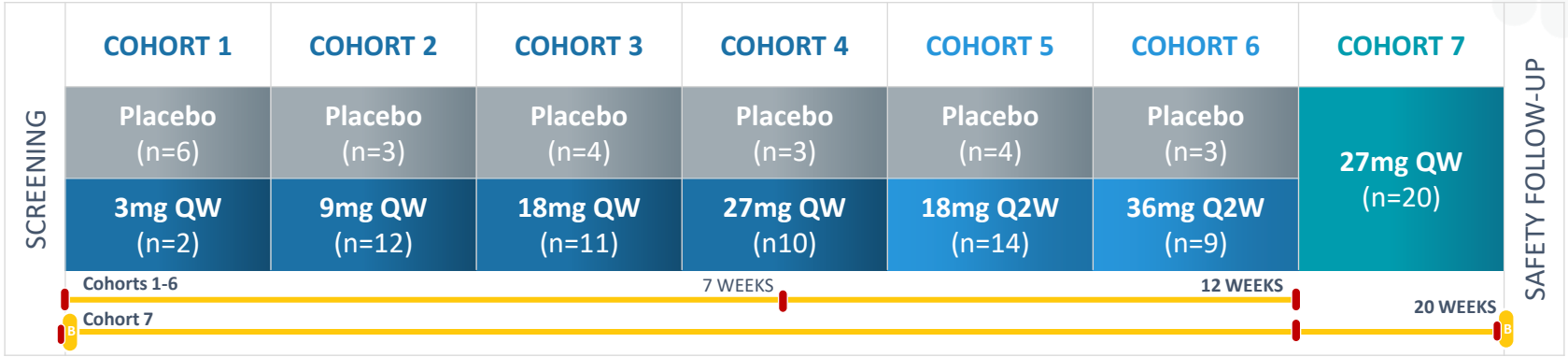
Pegozafermin Has Potential to Be Mainstay of Therapy in Liver and Cardio-Metabolic Disease



- Endogenous metabolic hormone that regulates energy expenditure and glucose and lipid metabolism
- Reduces liver fat through actions within the liver and adipose tissue
- Impacts liver fibrosis via metabolic pathways and upregulation of adiponectin
- Lowers TG levels by reducing triglyceride production and increasing catabolism

1. Bondurant LD, et al. *Cell Metab*. 2017;25(4):935-944.e4.
2. Schlein C, Talukdar S, Heine M, et al. *Cell Metab*. 2016;23(3):441-4553.
3. Yen CLE, et al. *J Lipid Research.2008;*49,(11): 2283-301.
4. Fisher FM, et al. *Genes Dev*. 2012;26(3):271–281.
5. Xu J, et al. *Diabetes*. 2009;58(1):250-259
6. Holland et al, *Cell Metab*. 2013 May 7;17(5):790-7.
7. Vandanmagsar, B., et al., *Cell reports 2015. 15*(8), 1686–1699.

Phase 1b/2a NASH Trial Design



COHORTS 1-6

KEY INCLUSION CRITERIA

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

COHORT 7

KEY INCLUSION CRITERIA

- F2-F3 NASH; NAS ≥4
- MRI-PDFF ≥8%

Pegozafermin is delivered subcutaneously

- *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)

- Interim data based on Jan 3, 2022 data cut
- 19/20 (95%) patients completed treatment and had end-of-treatment biopsies; 1 patient discontinued treatment due to withdrawal of consent

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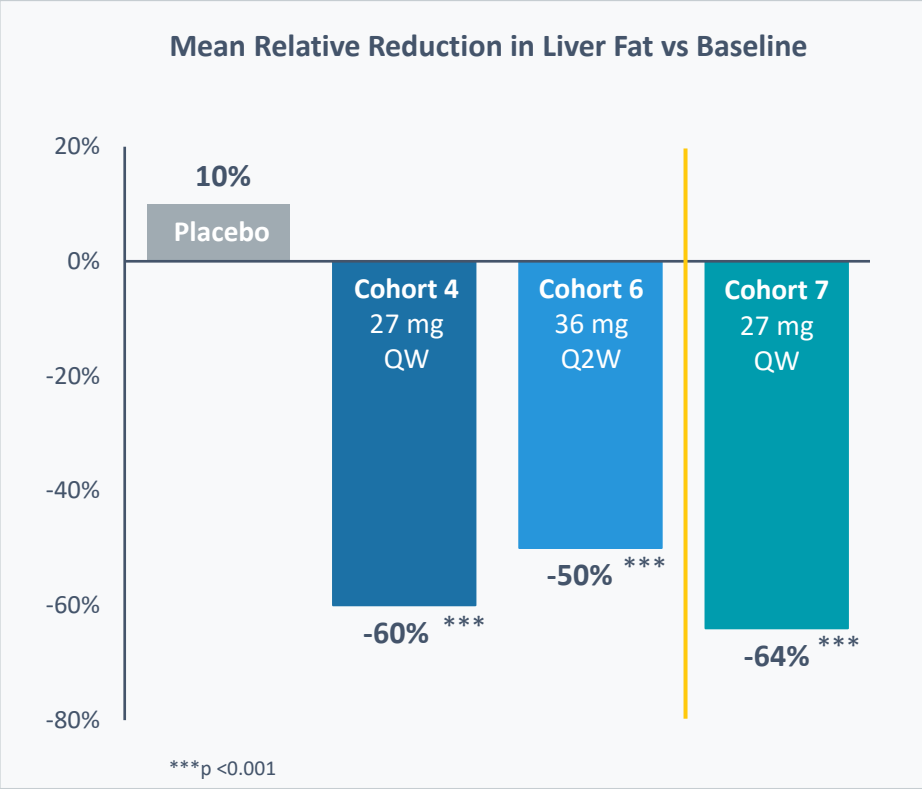
Baseline Characteristics

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	NA	35% / 65%
NAS	NA	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

NA: Not applicable

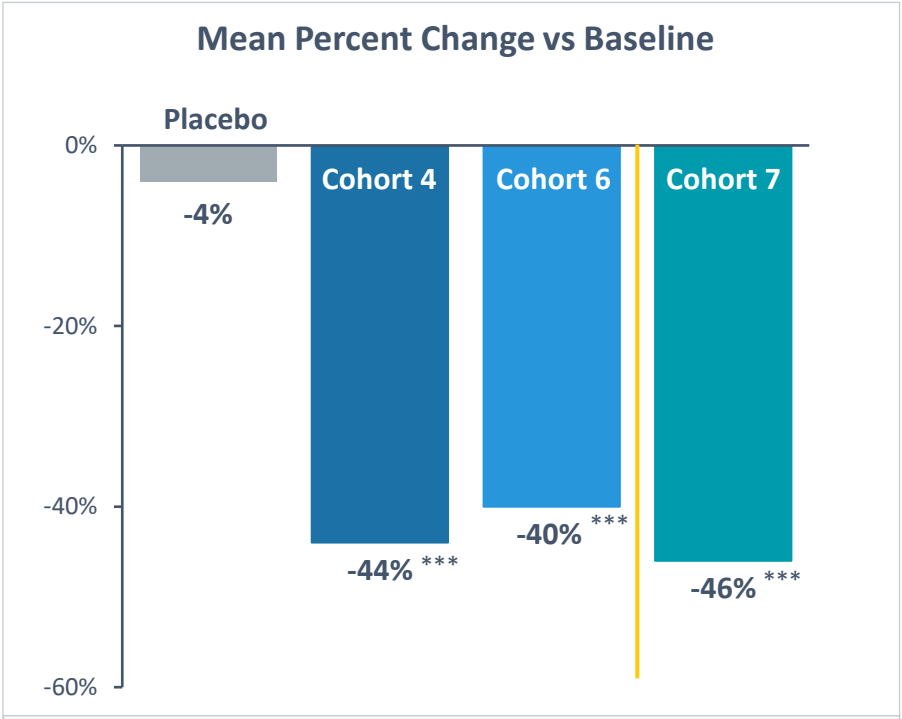
Pegozafermin Demonstrated Robust Liver Fat Reduction with High Responder Rates



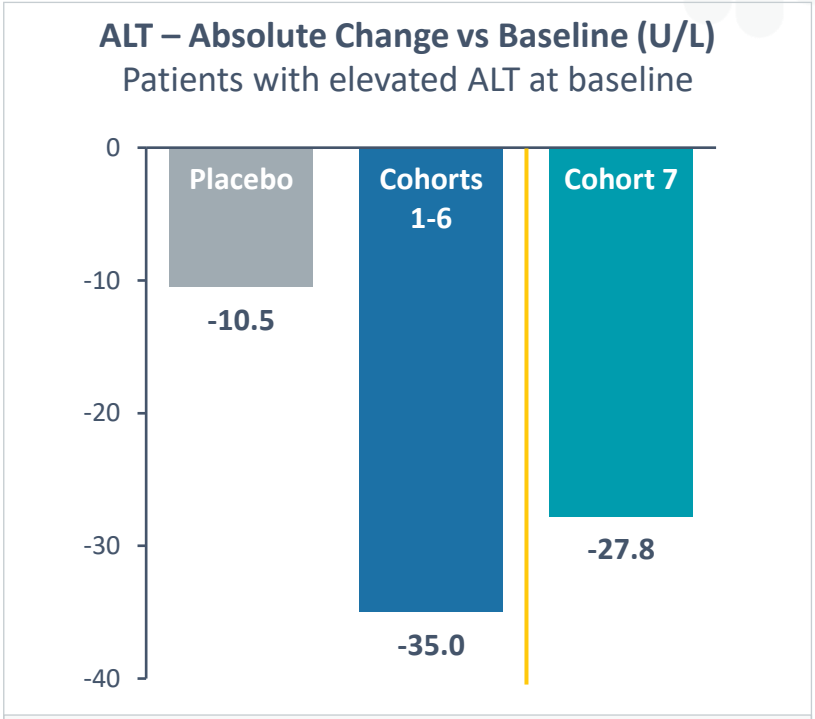
	≥30% Relative Reduction in Liver Fat	≥50% Relative Reduction in Liver Fat
Cohort 4	**86%**	**71%**
Cohort 6	**88%**	**50%**
Cohort 7	**100%**	**78%**

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



Comparable changes were observed with AST

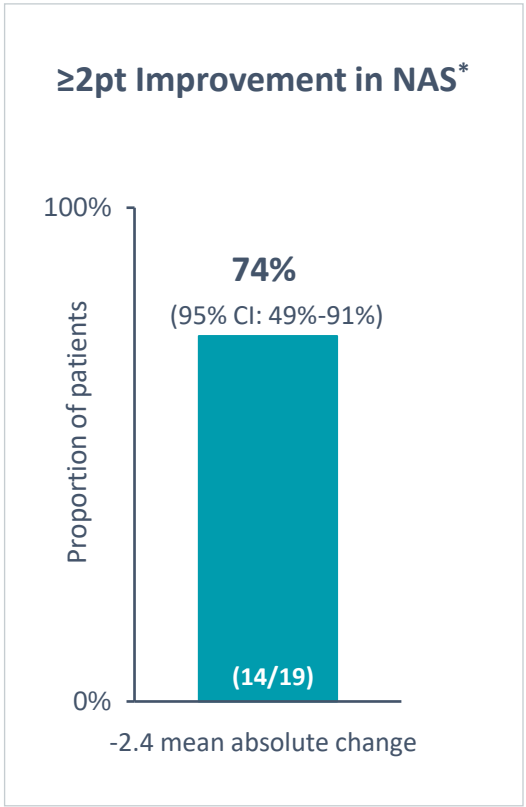


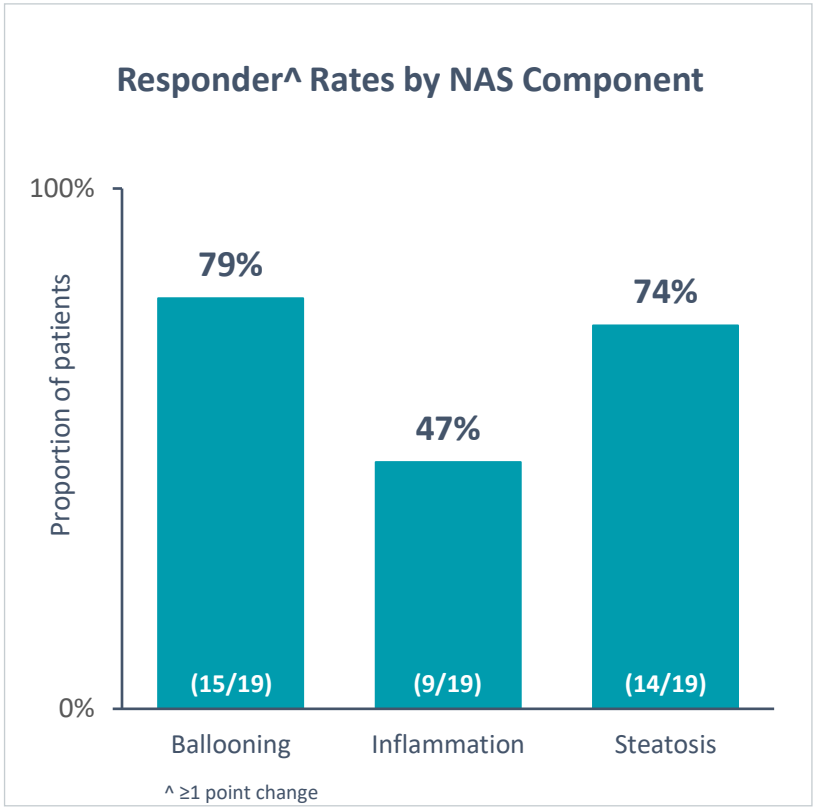
71% of pts on pegozafermin had ≥17 U/L reduction

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





- **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

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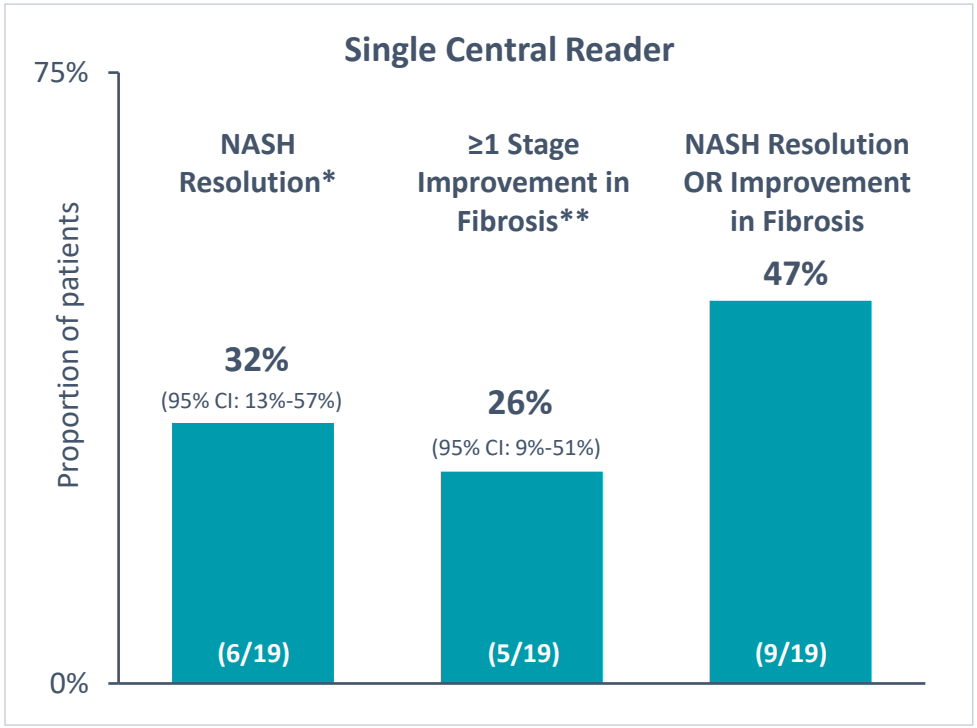
* with ≥1 point improvement in ballooning or inflammation

Pegozafermin Demonstrated Clinically Meaningful Changes on Key Histological Efficacy Endpoints

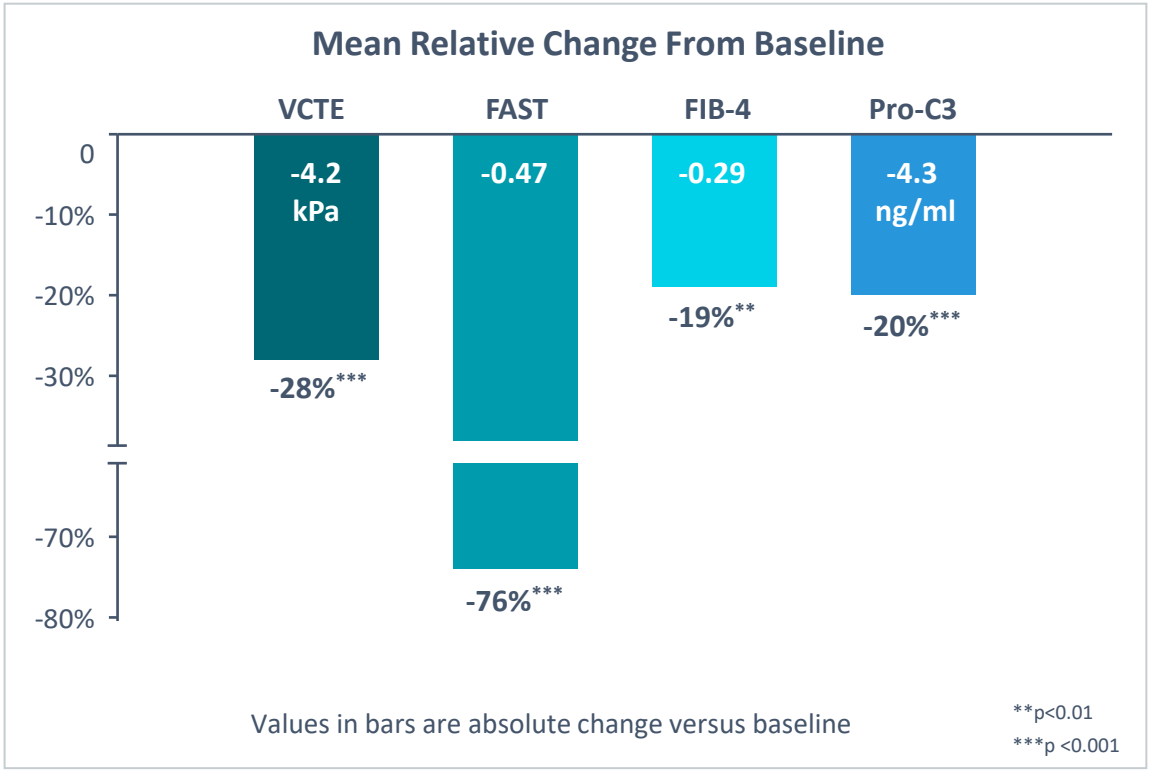


THREE-PANEL READ

- **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%)*

89bio *and no worsening of fibrosis **and no worsening of NASH

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



NIT DESCRIPTIONS

- 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

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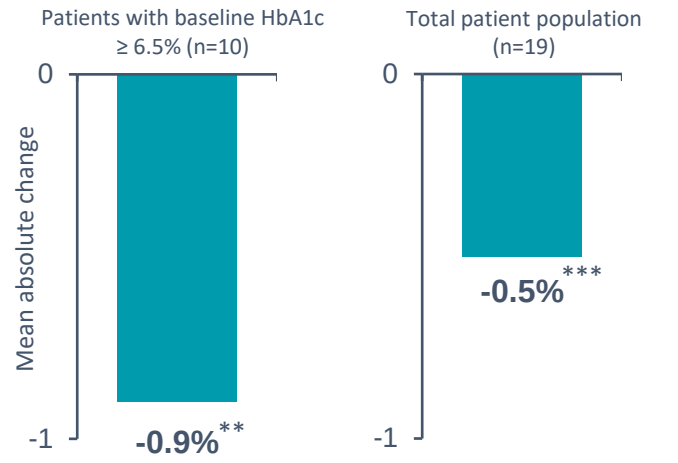
p value for change from baseline based on MMRM analysis
VCTE and FAST exclude one outlier with poor quality measurement

Pegozafermin Demonstrated Clinically Meaningful Improvement on HbA1c and Adiponectin with Notable Body Weight Reduction

Absolute Change in HbA1c

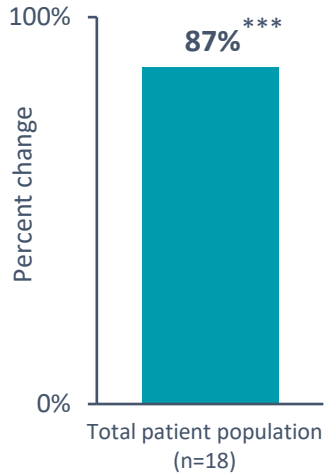


HbA1c: Baseline: 7.3%; Week 20: 6.4%

**p<0.01
***p<0.001

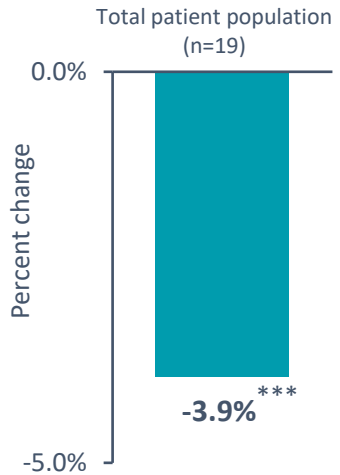
Patients with baseline HbA1c ≥ 6.5% were on an average of 2 anti-diabetic medications

Adiponectin Change



***p<0.001

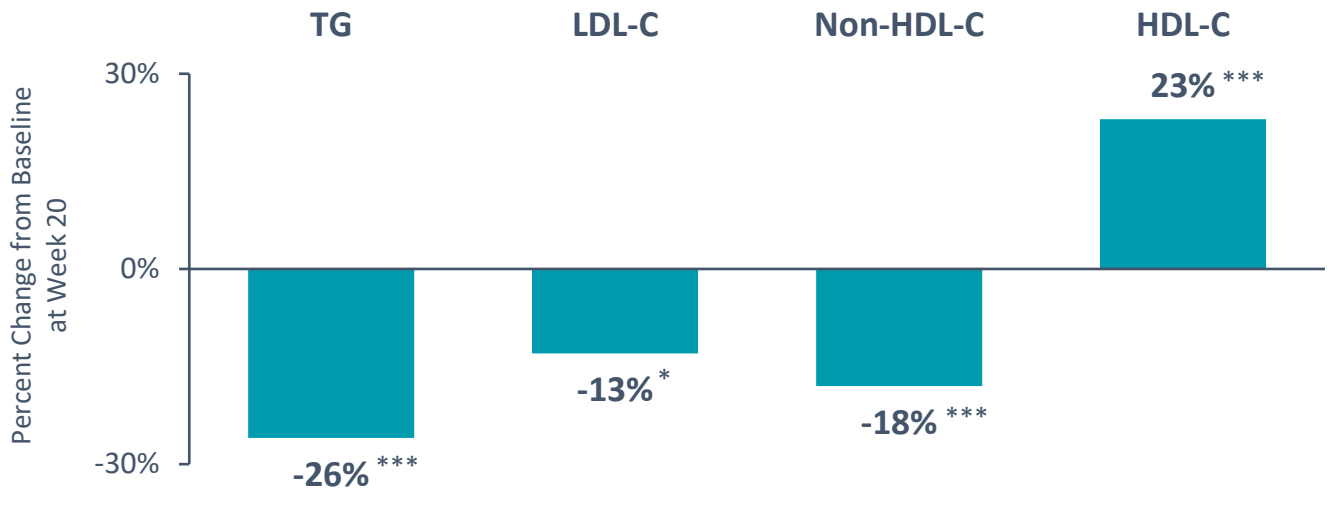
Weight Change



***p<0.001

p value for change from baseline based on MMRM analysis; all data are from cohort 7

Pegozafermin Demonstrated Clinically Meaningful Improvements in Lipid Parameters



Lipid benefits consistent in the subgroup taking background dyslipidemia treatments (n=12)

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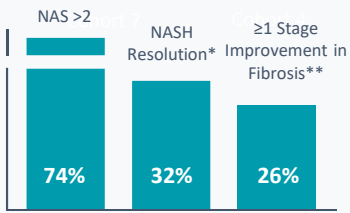
p value for change from baseline based on MMRM analysis; all data are from cohort 7

Pegozafermin Improves Many Markers of Liver Health and Co-Morbidities Associated with NASH

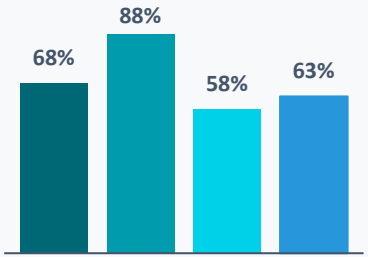
LIVER HEALTH

HISTOLOGY
Cohort 7



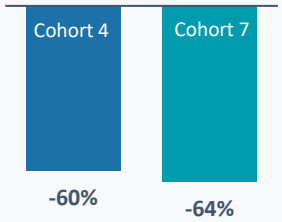
*and no worsening of fibrosis
**and no worsening of NASH

NITs
Cohort 7

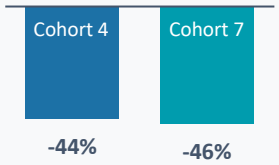


% Responders

MRI-PDFF^



ALT^

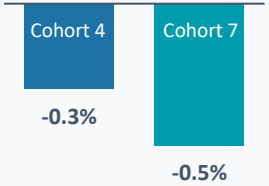


INSULIN RESISTANCE

HbA1c
Mean Absolute Reduction

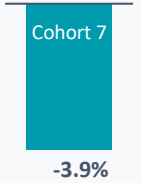
Patients with baseline HbA1c ≥ 6.5% (n=10)

HbA1c
Mean Absolute Reduction

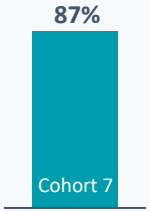


OBESITY

WEIGHT CHANGE^

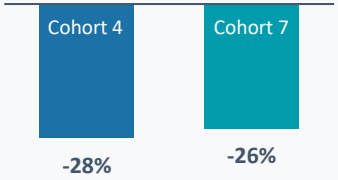


ADIPONECTIN
% Change

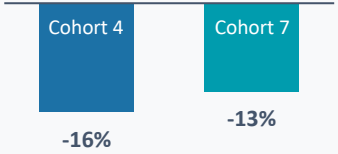


DYSLIPIDEMA

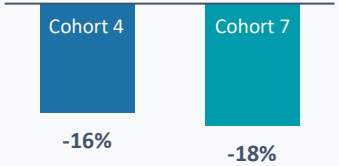
TG^



LDL-C^



Non-HDL-C^



^Mean reduction from baseline

Cohort 7: 27mg QW data at 20 weeks, Cohort 4: 27mg QW data at 13 weeks

Pegozafermin - Favorable Safety and Tolerability in Phase 1b/2a Study

- No treatment-related serious adverse events; only 1 treatment-related discontinuation
- Pooled pegozafermin treatment related Adverse Events (AEs) observed in ≥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	Efruxifermin
Structure	• GlycoPEGylated FGF21	• Fc-fused FGF21

Efficacy	• Significant effect on liver parameters
	  • Similar effects on multiple non-invasive markers
	  • Similar efficacy on NAS >2; other histology endpoints range from lower to equivalent*
	• Robust impact on metabolic parameters – Pegozafermin 27mg potential better glycemic control	

Tolerability	• Well-tolerated at all doses • Low incidence of GI events • No tremors	• High frequency and withdrawals from GI events in multiple studies • Tremors observed in multiple studies
Dosing Frequency	• Weekly and Every Two-Weeks	• Weekly
Phase 2b Drug Product	• Liquid	• Frozen
Development Plan	• Phase 2b (F2/F3) results expected in 1Q23; Larger well-powered Phase 2b	• Phase 2b (F2/F3) results expected in 3Q22; 3 arms – 128 patients

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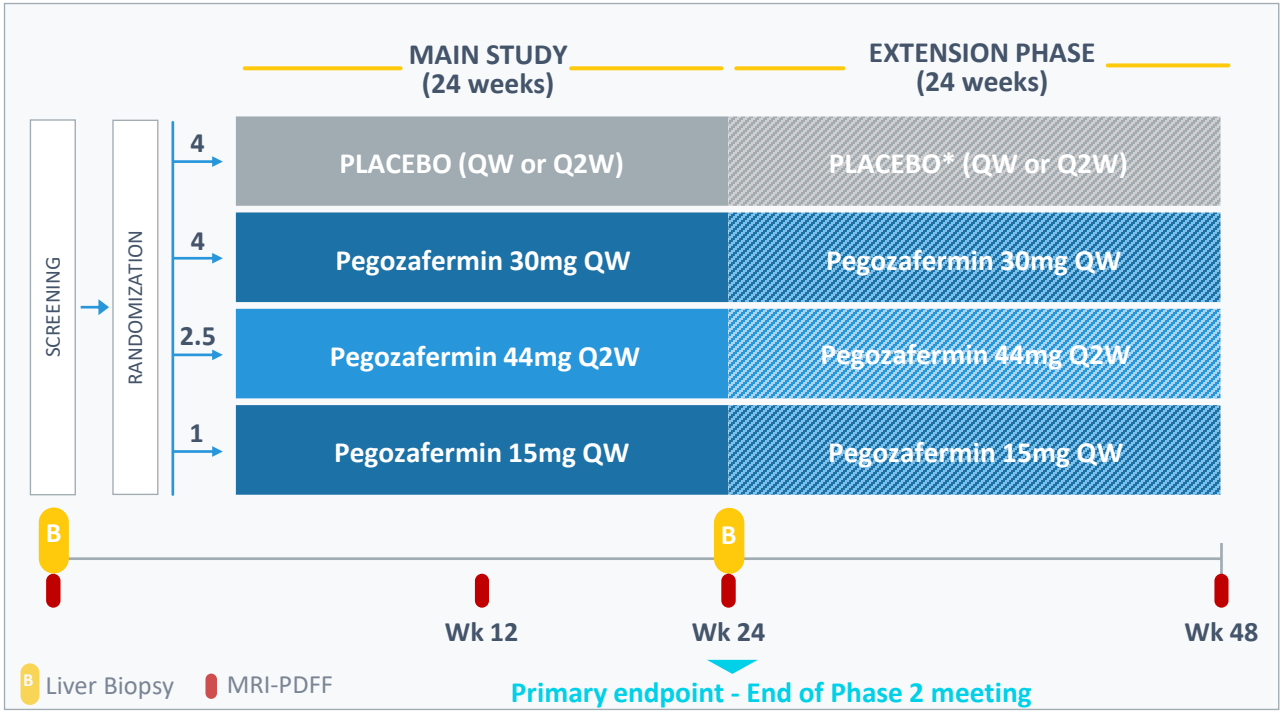
* based on range including histology assessment from 3-panel readers

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
- NAS ≥2 point improvement
- Composite histology and metabolic endpoints

BIOPSY READING

- 3-panel consensus read – industry best-in-class approach

Planned randomization (~200 patients) – 4 : 4 : 2.5 : 1 (placebo : 30mg QW : 44mg Q2W : 15mg QW)

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* Some placebo patients will be re-randomized in the extension phase to receive pegozafermin

Financial Position Summary

Cash, cash equivalents and short-term investments

$200.5M pro forma cash as of June 30, 2022 that includes estimated net proceeds from an underwritten public offering of common stock, pre-funded warrants and warrants

Corporate Highlights

Pegozafermin – potential important new cardio-metabolic drug; balanced effect on multiple key endpoints

- Impacts a broad spectrum of cardio and metabolic endpoints
- Robust data in two indications with a favorable safety and tolerability profile
- Potential first-to-market FGF21 analog

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

- Highly differentiated based on Phase 2 success across multiple endpoints
- Significant opportunity given large, under-served market with limited competition
- Established regulatory pathway allows efficient clinical development

Nonalcoholic Steatohepatitis (NASH) – Ph. 2b enrollment completion in 3Q22; data expected 1Q23

- FGF21 offers greatest promise in this category – addresses multiple facets of the disease
- Pegozafermin has demonstrated compelling results in clinic

Strong cash position with experienced team

- $200.5M* pro forma cash** as of June 30, 2022
- Track record of developing and commercializing successful drugs and business development at other companies

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* Includes estimated net proceeds from underwritten public offering of common stock, pre-funded warrants and warrants

** Includes cash and cash equivalents, restricted cash, and short-term available-for-sale securities

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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

Achievements and Milestones

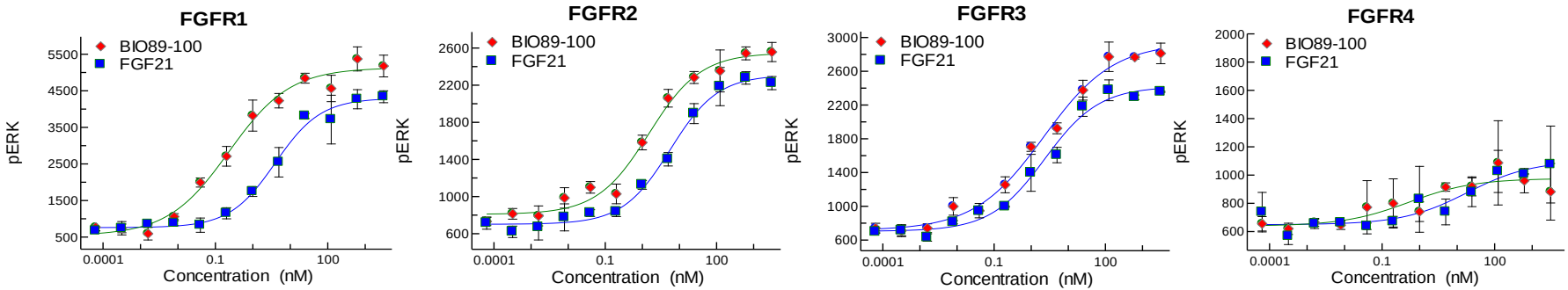
ACHIEVEMENTS

- ✓ Significant progress in the clinic: 5 clinical studies completed or ongoing in NASH/SHTG
- ✓ Completed key preclinical studies including long-term tox
- ✓ Scaled up manufacturing at CMO
- ✓ Developed liquid formulation
- ✓ IP through 2038
- ✓ Strong balance sheet

PROGRAM STATUS/MILESTONES

- Complete enrollment in Phase 2b (ENLIVEN) NASH (F2/F3) trial – 3Q22
- Topline results from Phase 2b (ENLIVEN) NASH (F2/F3) trial – 1Q23
- Initiate Phase 3 SHTG trial – 1H23

Pegozafermin Exhibits Highly Potent FGF Receptor Agonism



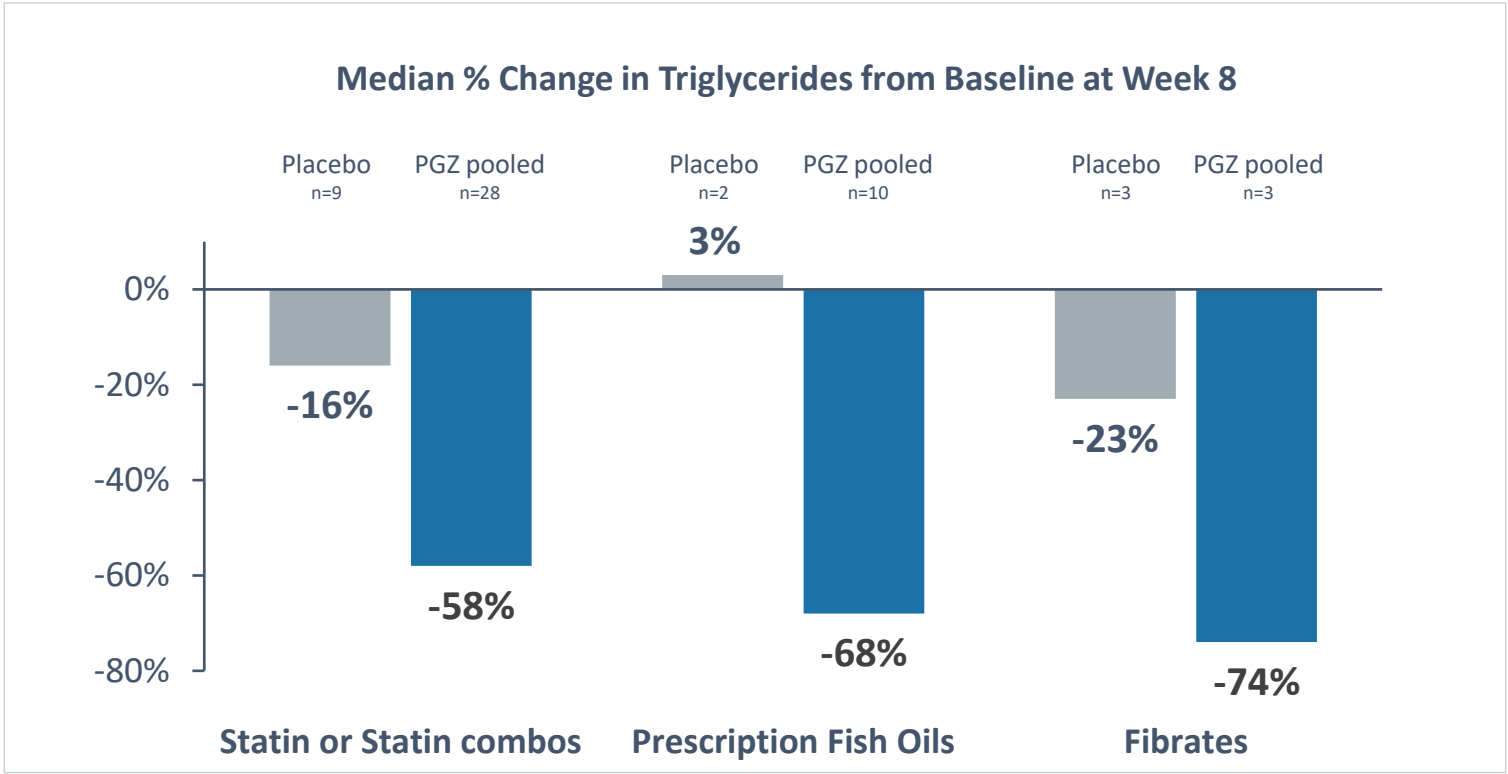
Pegozafermin has the potential to reproduce the beneficial metabolic effects of native FGF21

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

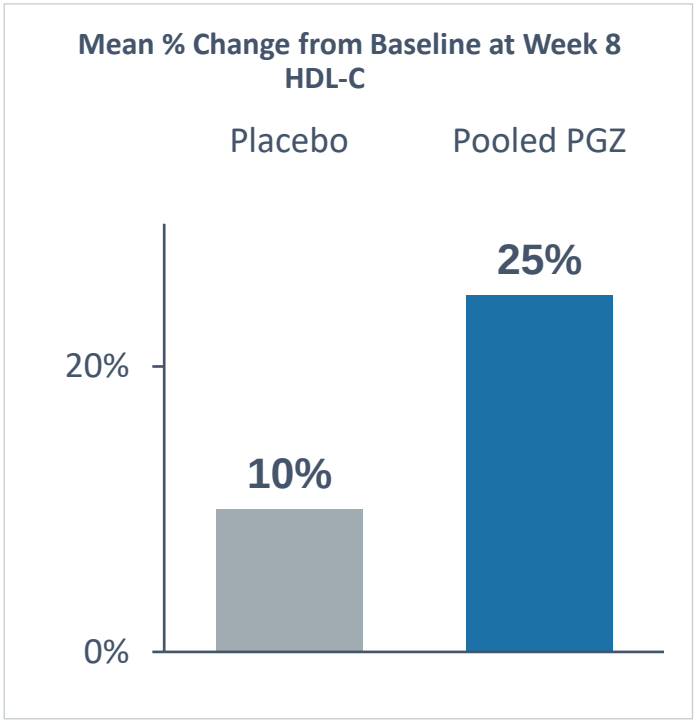
* Receptor agonism measured in L6 cells expressing β-klotho and either FGF Receptor 1c, 2c, 3c, or 4 via pERK functional assay
** Figures represent data from a single experiment; Table represents mean data from multiple experiments

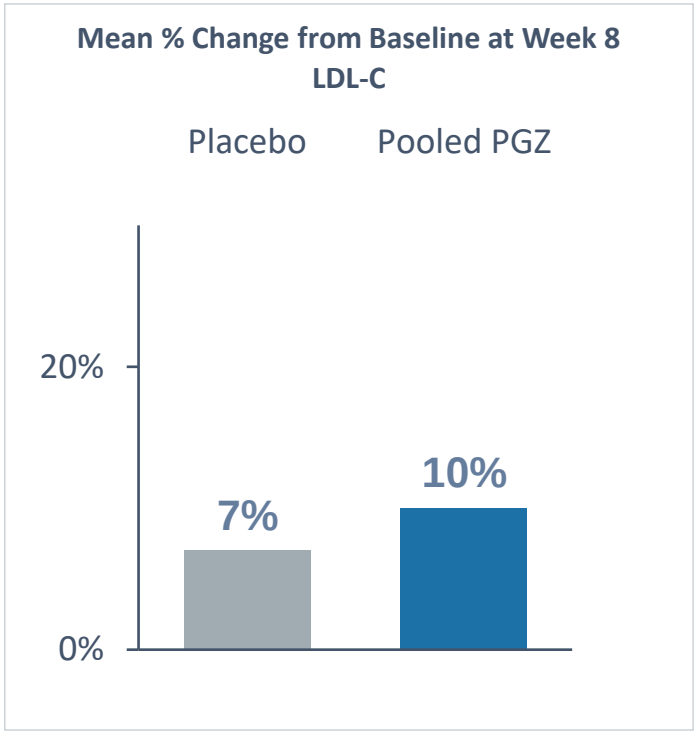
Pegozafermin Shows Significant Decrease in Triglycerides on Top of Statins, Fish Oils and Fibrates



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

Pegozafermin Demonstrated Clinically Meaningful Improvements in HDL-C and No Change in LDL-C vs. placebo



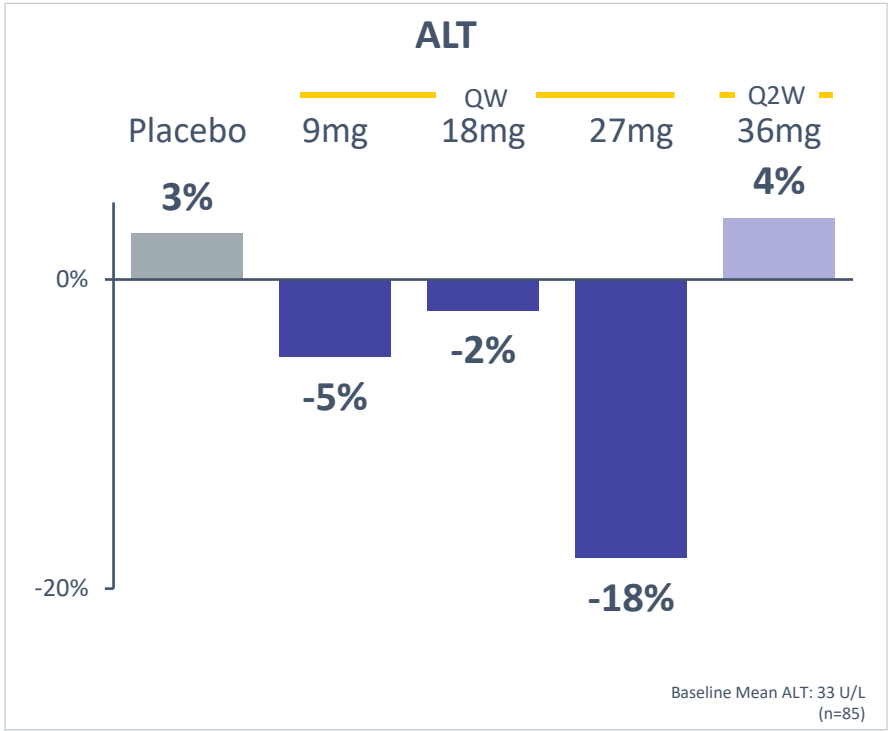


Existing therapies for SHTG increase LDL-C up to 45%

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

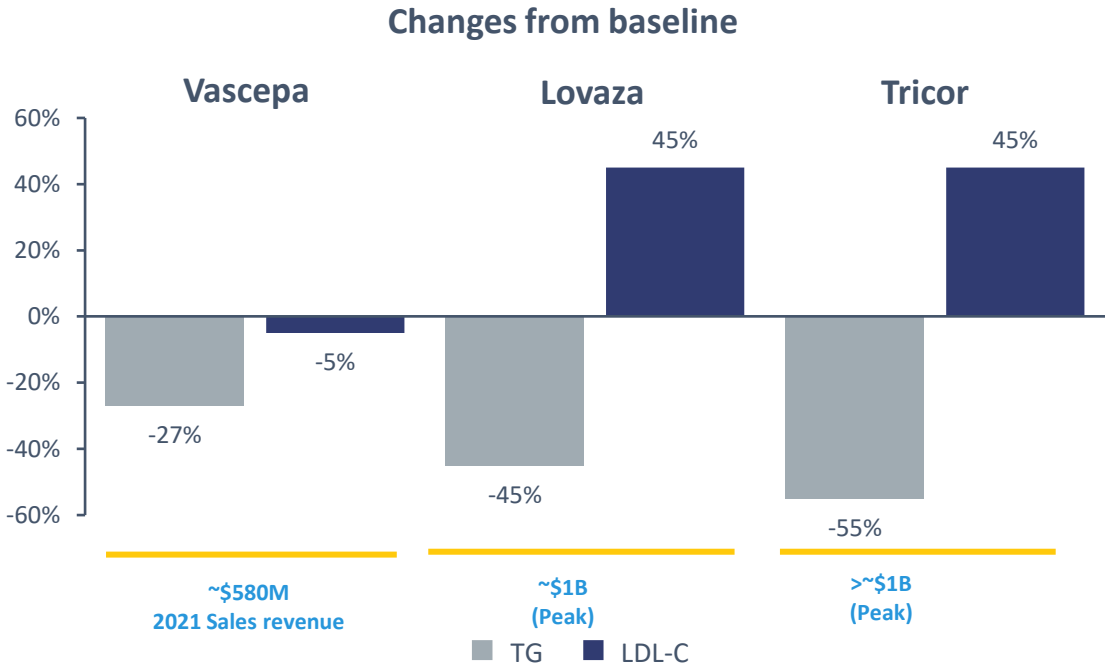
Pegozafermin Improved Liver Function Despite Normal Levels at Baseline

Mean % Change from Baseline at Week 8



Full Analysis Set

Current Therapies Have Had Commercial Success Despite Less than Ideal Profiles



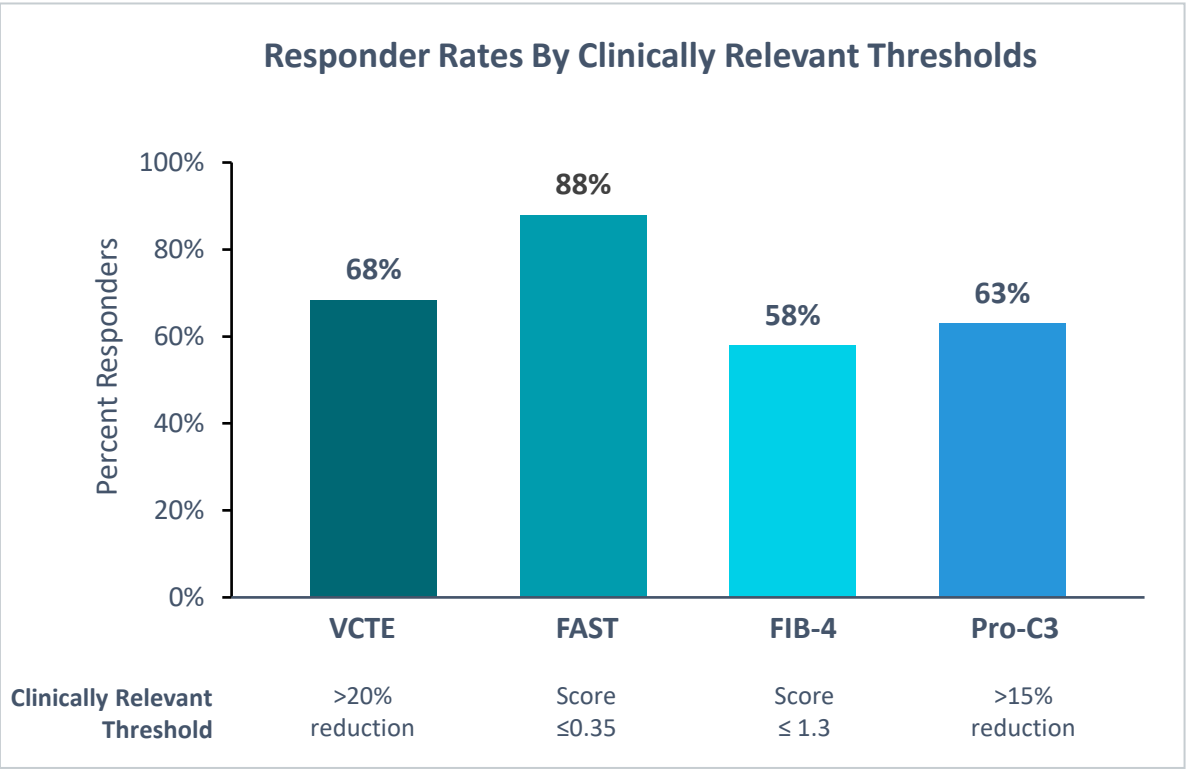
SAFETY / TOLERABILITY

FISH OILS		FIBRATES
Vascepa (EPA)	Lovaza (EPA+DHA)	Tricor
May prolong bleeding time		Myopathy, Creatinine increases, DDI

Lipitor decreases TG by 39% (low dose) and 52% (high dose). Level of sales for hypertriglyceridemia are unknown.

89bio *Conclusions on this slide are not based on head-to-head results

Pegozafermin had High Percentages of Responders Based on Clinically Relevant Thresholds for NITs



VCTE and FAST data exclude one outlier with poor quality measurement

CLINICALLY RELEVANT THRESHOLDS

- VCTE: >20% reduction correlates with fibrosis improvement
- FAST score: Score ≤ 0.35 predicts Fibrosis Stage F0/F1 and NAS <4
- FIB-4 score: Score <1.3 predicts Fibrosis Stage F0/F1
- Pro-C3: >15% reduction correlates with fibrosis improvement

Tapper EB, *Am J Gastroenterol,* 2016; Newsome PN, *Lancet Gastroenterol Hepatol,* 2020; Kanwal F, *Gastroenterology*, 2021; Luo Y, *Scientific Reports*, 2018

FGF21 Has Potential to be Leading Therapeutic Class in Development for NASH based on Broad Effects

		FGF21	FXR	Pan-PPAR*	THR-β	GLP-1
Robust efficacy with respect to liver pathologies	Liver fat reduction	✓			✓	✓
	Fibrosis improvement	✓	✓	✓		
	NASH resolution	✓		✓	✓	✓
Ability to address underlying co-morbidities	Triglyceride reduction	✓		✓	✓	✓
	LDL-C improvement	✓	Worsens LDL		✓	
	Glycemic control	✓		✓		✓
Well tolerated at effective dose	Limited Side Effects	✓ GI effect*	Pruritis LDL ↑	Weight Gain Edema	Drug-drug interaction GI effect	✓ GI effect
	Dosing frequency	Injectable QW/Q2W	Oral	Oral	Oral	Injectable

✓ Effective Unknown/Unchanged/No effect

* for certain agents

Note: Table representative of data published and/or presented on the mid/late-stage clinical programs targeting these mechanisms.
Third party company data taken from publications/publicly available presentations.

Competitor Data – Biomarkers and Non-Invasive Tests

Parameter Mean or %	**Pegozafermin 27mg**	Efruxifermin 28mg / 50mg	Ocaliva 25mg	Lanifibranor 1200mg	Resmetirom Ph2b	Semaglutide 0.4mg
MRI-PDFF ≥30%	100%	100% / 100%	--	--	60%	70%
ALT (% chg vs. baseline)	-46%	-40%[E] / -50%[E]	-33%	-39%[E,C]	-30%[C]	-58%
Weight (% chg. vs. baseline)	-3.9%	-0.2%[C] / -2.1%[C]	-2.3%[C]	+2.9%[C]	-0.6%[C]	-13%
HbA1c (chg. vs. baseline)	-0.5 -0.9*	-0.1 / -0.4 +0.1** / -0.6**	0	-0.4	+0.04	-1.15**
Pro-C3 (% chg. vs. baseline)	-20%	-32%[C] / -36%[C]	--	-14% (pooled)	-38%[E]	--
Adiponectin (% chg. vs. baseline)	88%	65% / 80%			28%	
VCTE kPa (chg. vs. baseline	-4.6	--	-1.2[E]	-1.0[E]	--	-3.0[C]

E: value estimated based on presented data, C: calculated
* In patients with HbA1c ≥ 6.5% at baseline
** in patients with Type 2 diabetes at baseline

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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 not based on head-to-head results. Response rates are not guaranteed to maintain the same levels in future clinical studies.

Competitor Data – Biopsy Based Histology Endpoints

Parameter Mean or %	**Pegozafermin 27mg**	Efruxifermin 28mg / 50mg	Ocaliva 25mg	Lanifibranor 1200mg	Resmetirom Ph2b	Semaglutide 0.4mg
%F2/F3	100%	63% / 65%	100%	76%	42%	68%
NAS 2 point reduction	74%	77% / 77%	36%	64%	56%	--
-1 point ballooning	79%	85% / 85%	35%		57%*	74%
-1 point inflammation	53%	69% / 69%	44%		37%*	38%
-1 point steatosis	68%		41%		57%*	63%
NASH resolution	32% [up to 47%**]	46% / 54%	12%	45%	25%	59%
Fibrosis improvement	26% [up to 42%**]	46% / 62%	23%	42%	29%	43%

*excludes patients who had ≥5% weight loss

** based on a new analysis of the same histology slides by a panel of an additional three expert liver pathologists

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Competitor Data – AE profile in NASH program

Key Treatment-related GI Adverse Events (> 10%)	Pegozafermin Ph 1b/2a (all doses)	Efruxifermin Ph 2a (28/50 mg)
Diarrhea	13%	40%
Frequent bowel movements	--	13%
Nausea	12%	26%
Vomiting	--	18%
Increased appetite	13%	21%
Abdominal pain	--	11%

OTHER IMPORTANT AEs:

- Efruxifermin
  - Tremor
- Ocaliva
  - Pruritis (51%)
- Lanifibranor
  - Weight gain (8%)
  - Peripheral edema (8%)

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