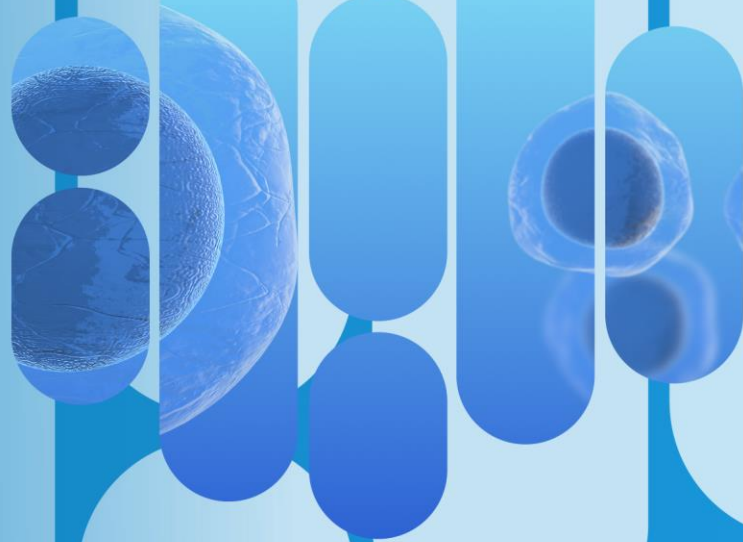# 89bio

Powerful Science
Meaningful Medicines
Changing Lives

Nasdaq: ETNB

September 2021

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, future revenues or performance, financing needs, plans or intentions relating to product candidates, estimates of market size, business trends, the anticipated timing, costs, design, endpoints and conduct of our planned and ongoing clinical trials for BIO89-100, our only product candidate, the association of preclinical data with potential clinical benefit, the timing of anticipated milestones, the effect of the COVID-19 pandemic on our clinical trials and business operations, the timing and likelihood of regulatory filings and approvals for BIO89-100, our ability to commercialize BIO89-100, if approved, the pricing and reimbursement of BIO89-100, if approved, the potential to develop future product candidates, our ability to scale up manufacturing, the potential benefits of strategic collaborations and our intent to enter into any strategic arrangements, 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.

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89bio - Investment Highlights

BIO89-100 HAS POTENTIAL TO BE A LEADING DRUG FOR LIVER AND CARDIO-METABOLIC DISORDERS

- Highly differentiated FGF21 using GlycoPEGylation technology to optimize efficacy and dosing
- Validated with compelling profile: strong efficacy, favorable safety/tolerability, and potential best-in-class dosing

PURSUING TWO PROMISING LARGE INDICATIONS WITH COMPETITIVELY DIFFERENTIATED PROFILE

- NASH: Potential backbone treatment addressing multiple facets of NASH
- SHTG: Potential to treat TGs and metabolic dysregulation with quicker path to market

PROGRAM STATUS/MILESTONES

- NASH: Phase 2b ENLIVEN trial ongoing; Topline data from paired-biopsy, open-label histology cohort by YE21; PK study in patients with compensated cirrhosis (fibrosis stage F4) ongoing
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STRONG CAPITAL POSITION - $170.9M IN CASH, CASH EQUIVALENTS, AND SHORT-TERM INVESTMENTS (JUN 30, 2021)

ESTABLISHED MANUFACTURING EXPERTISE AND IP PROTECTION INTO 2038 AND BEYOND

Advancing BIO89-100 in Clinical Development

Indication	Preclinical	Phase 1	Phase 2	Phase 3
NASH	Phase 2b trial		ENliven	
	Phase 1b/2a histology cohort			
SHTG	Phase 2 trial		ENtrigue	

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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

Healthy liver → Lipogenesis → NAFLD → Inflammation → NASH → Fibrosis → Cirrhosis

- 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%

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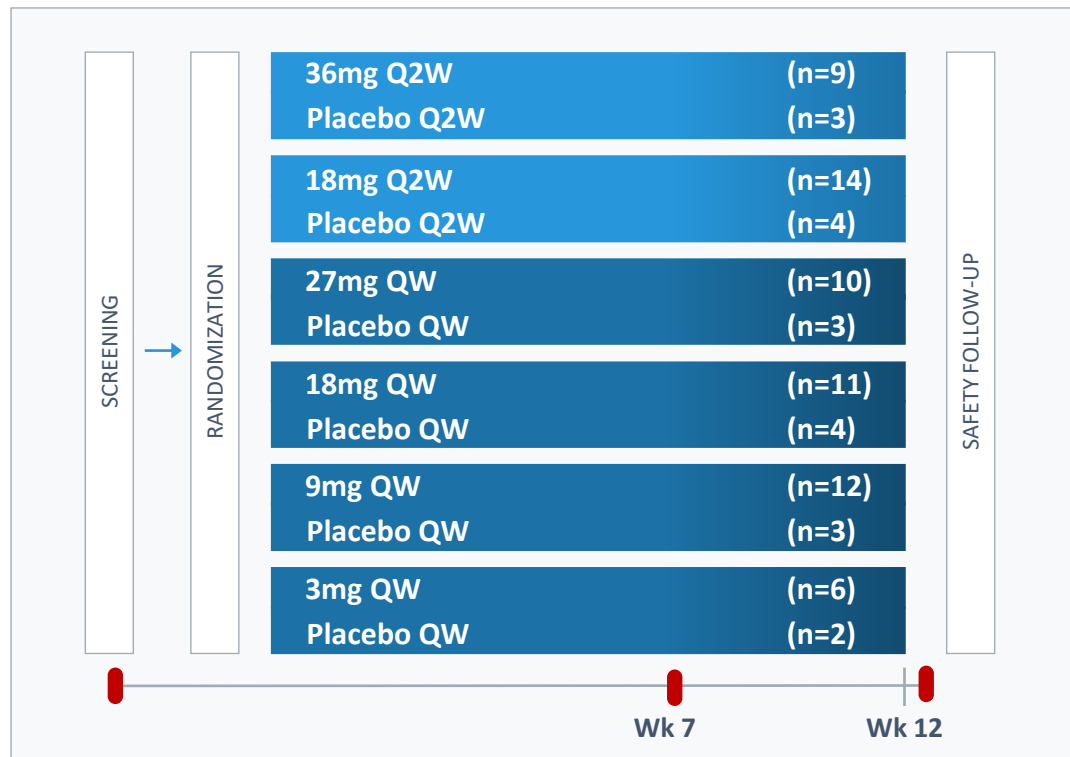# FGF21 Has Potential To Be Mainstay of Therapy In NASH
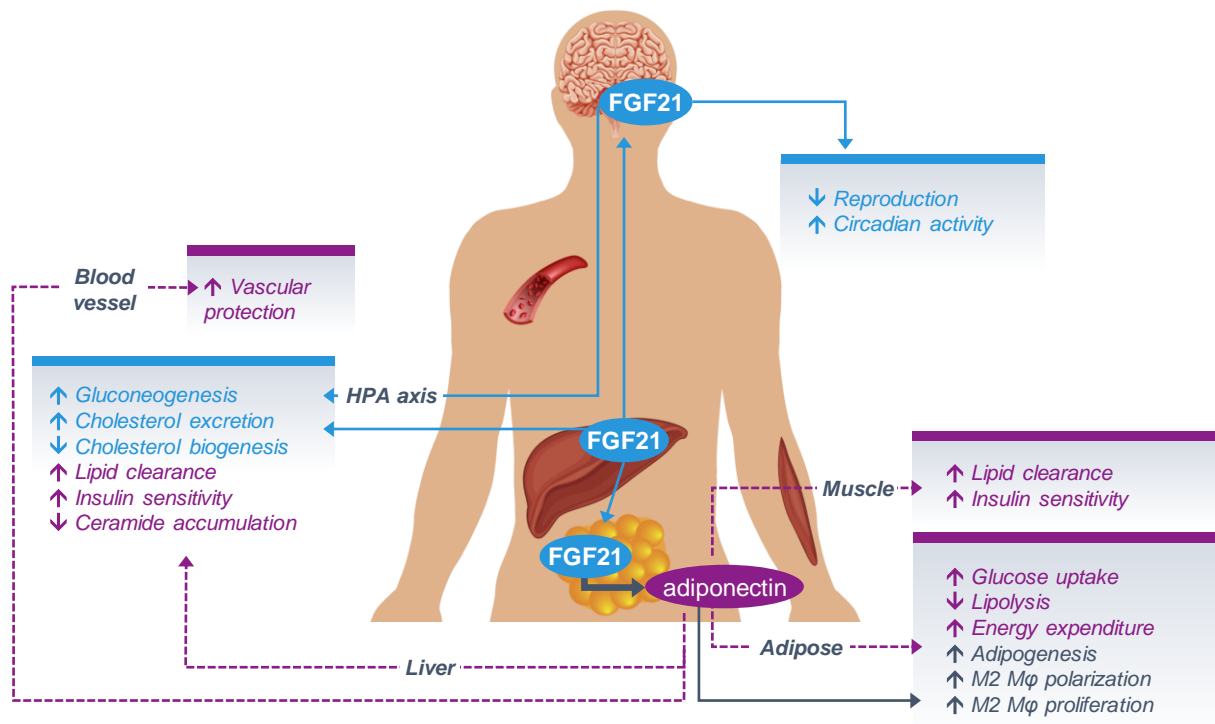
- Endogenous metabolic hormone that regulates energy expenditure and glucose and lipid metabolism

- Reduces liver fat by action within liver and from periphery

- Impacts liver fibrosis via metabolic pathway and upregulation of adiponectin

- Native FGF21 has a short half-life of < 2 hours

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BIO89-100 Is An FGF21 Optimally Engineered To Balance Potential for Efficacy and Long Dosing Interval
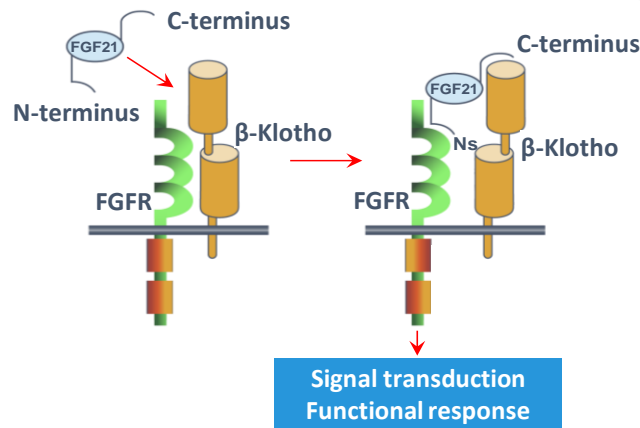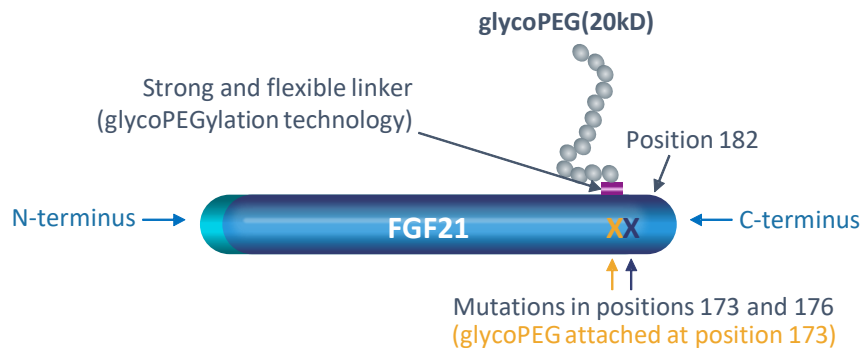
- Proprietary glycoPEGylation technology with site-specific mutations

- 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

- No activity against FGF receptor 4 which is the primary target of FGF19, and which can lead to increased LDL levels

Phase 1b/2a NASH Trial Design

KEY INCLUSION CRITERIA

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

  *Patients with biopsy-proven F1-3
  #Central obesity plus T2DM or evidence of liver injury

KEY TRIAL ENDPOINTS

- Safety, PK
- Relative changes in liver fat
- Serum lipids, liver and metabolic markers

- Placebo (n=19) combined across cohorts for analysis
- Randomized, pharmacodynamic (PD) and safety analysis set n=81; Study completers n=71
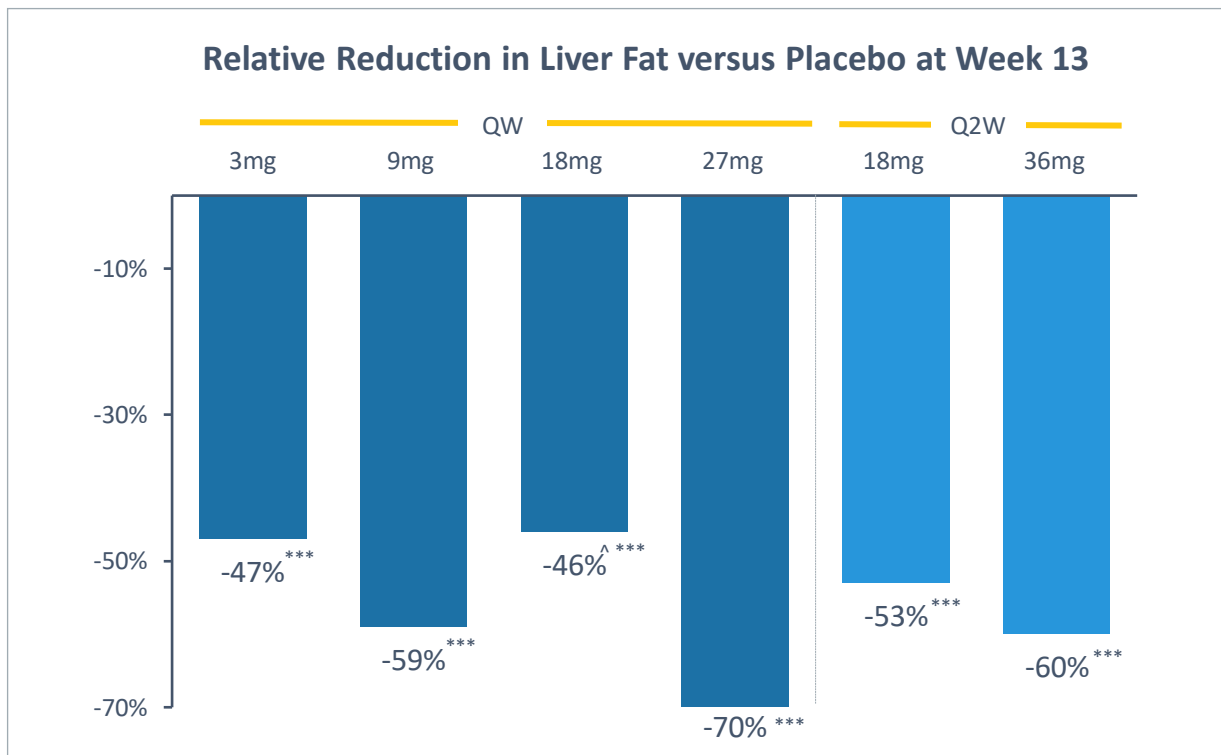- MRI analysis set n=75 (patients with post-baseline MRI)

Majority of Patients on BIO89-100 Achieved ≥50% Reduction in Liver Fat

Relative Reduction in Liver Fat versus Placebo at Week 13

MRI Analysis Set; MMRM LS Mean; * p<0.05; ** p<0.01; *** p<0.001 versus placebo; placebo relative increase of 10% from baseline

^ 60% relative reduction in liver fat vs. placebo when final 2 patients from this dose group were excluded in a post-hoc analysis. These 2 patients came from 2 separate newly activated sites which came online just before the study closed enrollment in the midst of the COVID pandemic

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Significant Numbers of Patients Achieved Clinically Meaningful Responder Rates on BIO89-100

	≥30% Relative Reduction in Liver Fat	≥50% Relative Reduction in Liver Fat
Placebo	0%	0%
3mg QW	60%**	20%
9mg QW	82%***	54%***
18mg QW^	60%**	50%**
27mg QW	86%***	71%***
18mg Q2W	69%**	39%**
36mg Q2W	88%***	50%**

- Up to **43%** of patients normalized their liver fat (<5%)

- ≥30% relative reduction in liver fat has been correlated with NASH resolution and fibrosis improvement

- 71% of patients on 27 mg QW dose had ≥70% relative reduction in liver fat

MRI Analysis Set; MMRM LS Mean; * p<0.05; ** p<0.01; *** p<0.001 versus placebo

^ 75% and 63% patients achieved a ≥30% and a ≥50% reduction in liver fat vs. baseline when final 2 patients from this dose group were excluded in a post-hoc analysis. These 2 patients came from 2 separate newly activated sites which came online just before the study closed enrollment in the midst of the COVID pandemic

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BIO89-100 Significantly Reduced Liver Fat Across All Dose Groups
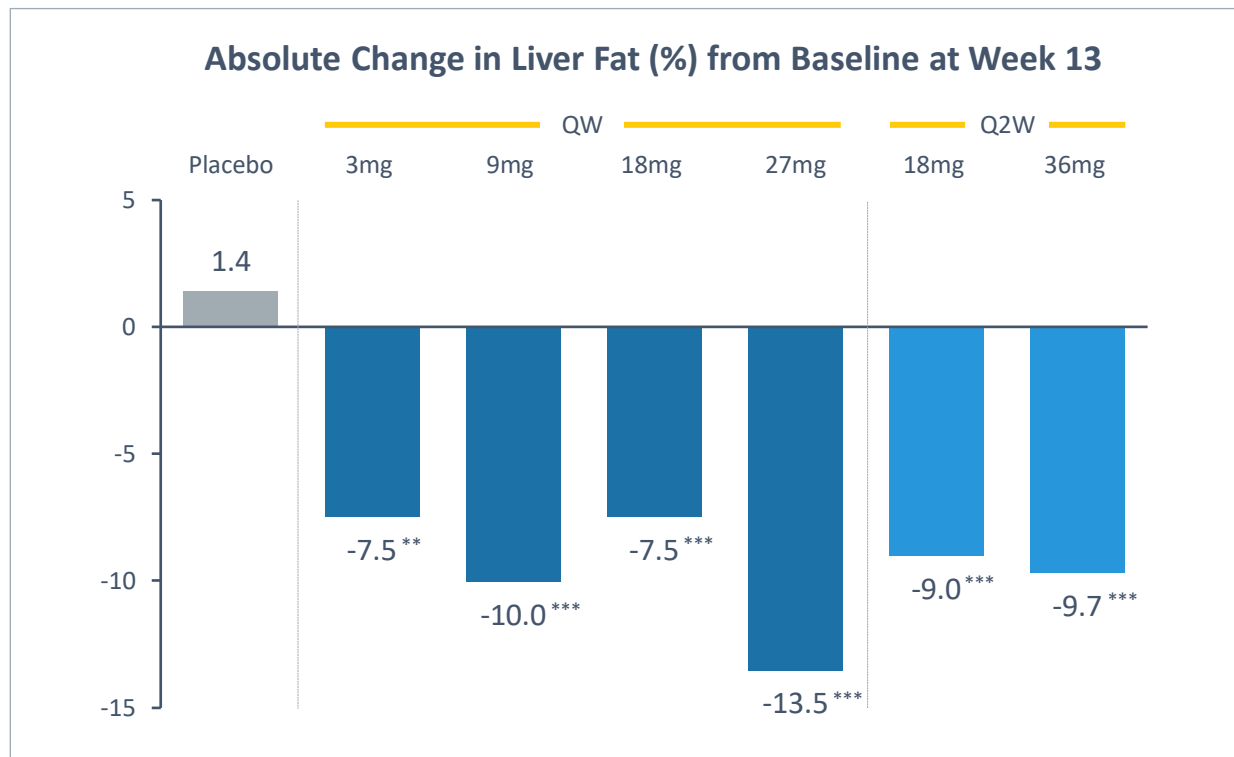
Absolute Change in Liver Fat (%) from Baseline at Week 13

MRI Analysis Set; MMRM LS Mean; * p<0.05; ** p<0.01; *** p<0.001 versus placebo

^ 10% absolute reduction in liver fat from baseline when final 2 patients from this dose group were excluded in a post-hoc analysis. These 2 patients came from 2 separate newly activated sites which came online just before the study closed enrollment in the midst of the COVID pandemic

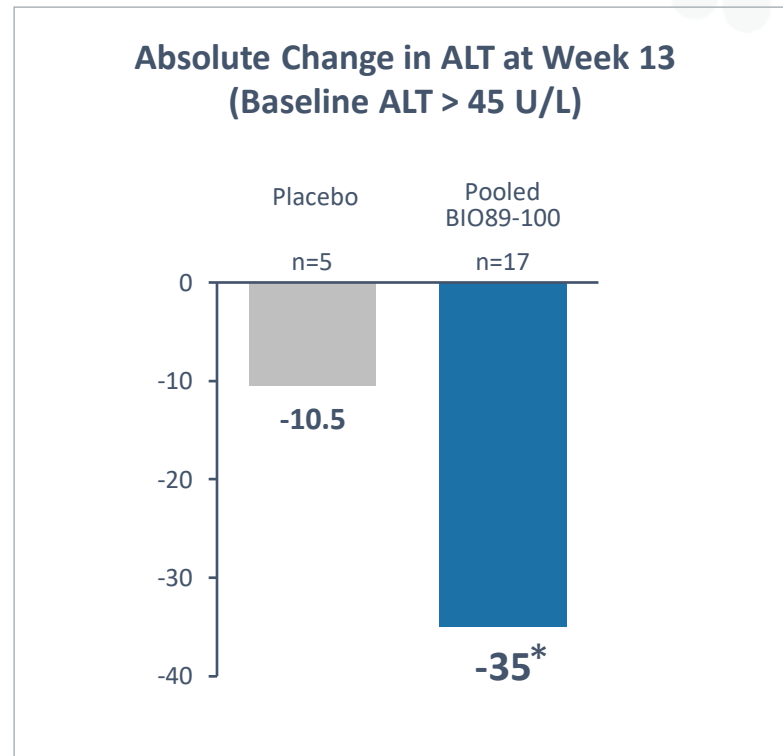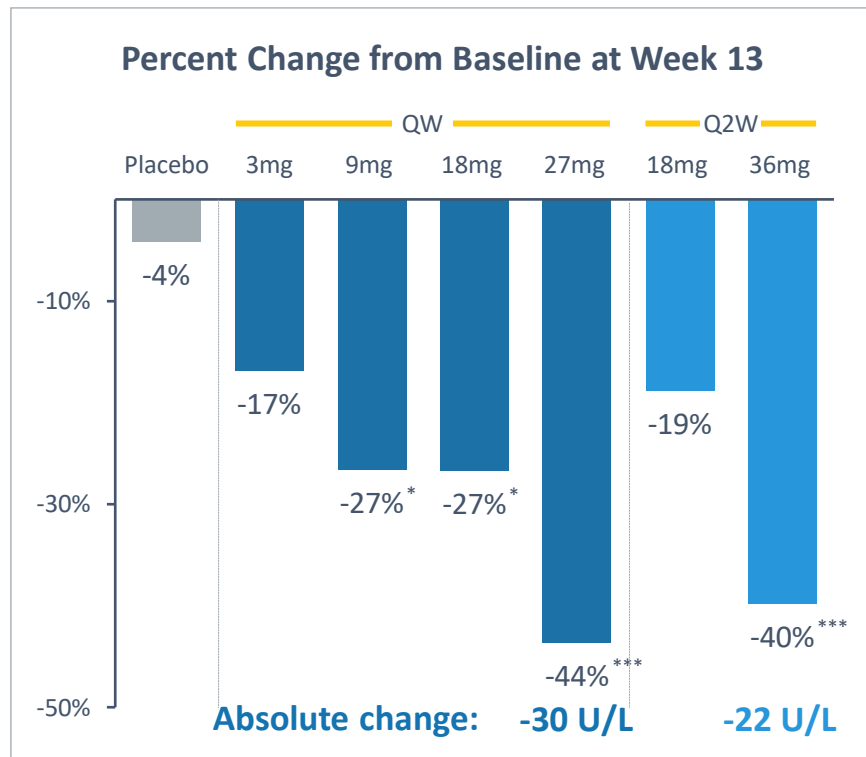- Baseline characteristics were similar between NASH and PNASH patients

- Reductions in absolute percentage of liver fat from baseline, % responders on MRI-PDFF and BIO89-100's effect on reducing ALT and TGs were also similar across NASH and PNASH patients

BIO89-100 Significantly Reduced ALT with Greater Reduction Observed in Patients with Elevated Baseline ALT

Percent Change from Baseline at Week 13

QW — 3mg, 9mg, 18mg, 27mg
Q2W — 18mg, 36mg

- Placebo: -4%
- 3mg: -17%
- 9mg: -27% *
- 18mg: -27% *
- 27mg: -44% ***
- 18mg (Q2W): -19%
- 36mg (Q2W): -40% ***

Absolute change: -30 U/L   -22 U/L

Absolute Change in ALT at Week 13 (Baseline ALT > 45 U/L)

- Placebo (n=5): -10.5
- Pooled BIO89-100 (n=17): -35*

Change in ALT of ≥17 U/L has been correlated with improvement in fibrosis

BIO89-100 Significantly Reduced Triglycerides with Greater Benefit Observed in Patients with High Triglycerides

Percentage Change from Baseline at Week 13 (All Patients)

QW — Placebo, 3mg, 9mg, 18mg, 27mg

Q2W — 18mg, 36mg

- Placebo: -2%
- 3mg: -23%
- 9mg: -24%*
- 18mg: -18%
- 27mg: -28%*
- 18mg (Q2W): -28%*
- 36mg (Q2W): -21%

TG Normalization# Rate at week 13 (Subgroup with Baseline TG ≥200 mg/dL)

- Placebo: 0% (N=5)
- Pooled BIO89-100: 53% (N=15)
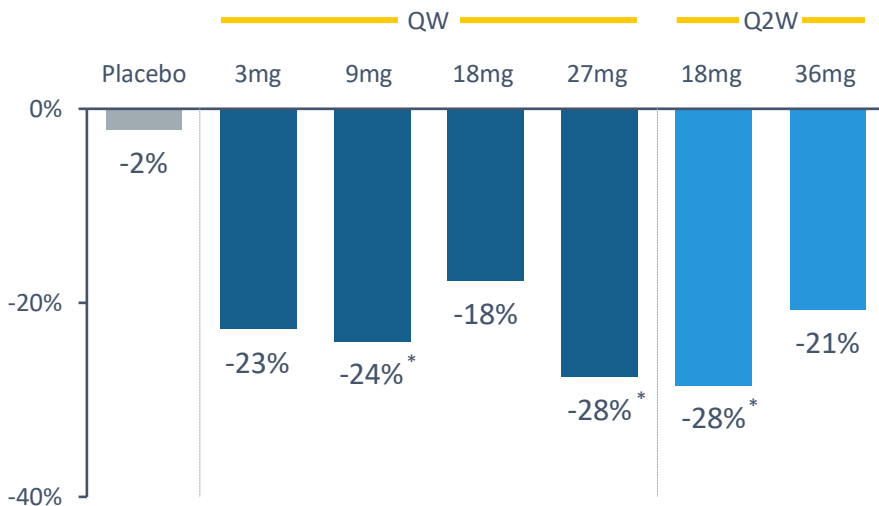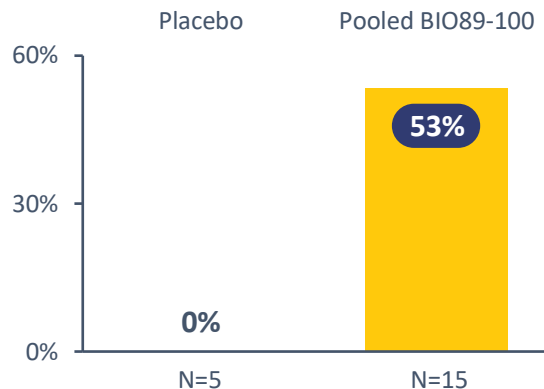
Decrease from baseline in BIO89-100 treated subgroup with baseline TG ≥200 mg/dL
- TG: 33%-49%
- Non-HDL: 8%-29%

BIO89-100 (27 mg QW) Improved Metabolic Markers

Placebo-Adjusted Relative Change from Baseline at Week 13

Chart showing placebo-adjusted relative change from baseline at Week 13 for metabolic markers:
- HOMA-IR: -41.3%
- Glucose: -15.1%
- HbA1c: -4.3%
- Weight: -2.2%*
- Adiponectin: 65.1%***

HbA1c (%) placebo adjusted change from baseline = -0.3
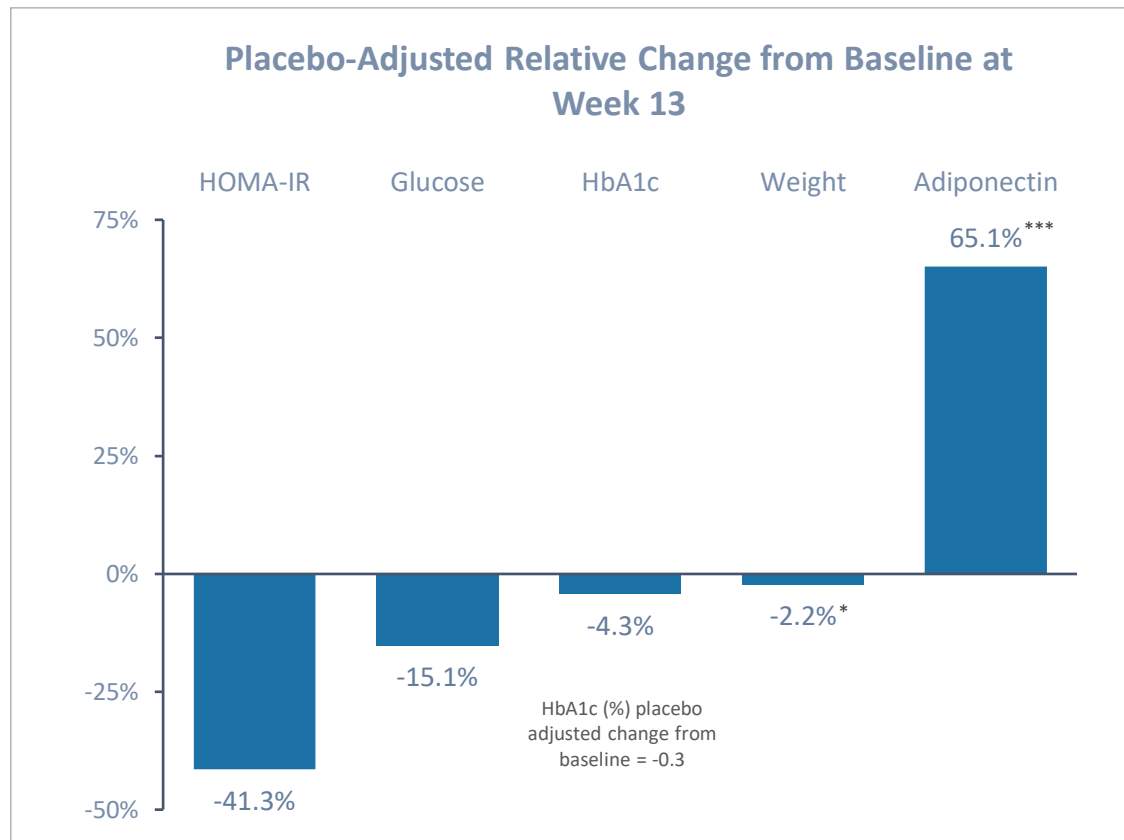
BIO89-100 Demonstrated a Favorable Safety Profile

| Treatment Emergent Adverse Event (TEAE)	Placebo (n=18)	3mg QW (n=7)	9mg QW (n=12)	18mg QW (n=11)	27mg QW (n=10)	18mg Q2W (n=14)	36mg Q2W (n=9)
TEAE Leading to Death	0	0	0	0	0	0	0
TEAE Leading to Discontinuation	0	0	0	0	1[a]	1[b]	0
Serious Adverse Event COVID 19 [Not Drug Related]	0	0	0	0	0	1	1

[a] skin rash; [b] hyperglycemia [Not Drug Related]

BIO89-100 Was Well Tolerated Across Doses
Low Incidence of Treatment-Related Emergent AEs in ≥ 10% of Pooled BIO89-100 Group

Preferred Term n (%)	Placebo (n=18)	Pooled BIO89-100 (n=63)	3mg QW (n=7)	9mg QW (n=12)	18mg QW (n=11)	27mg QW (n=10)	18mg Q2W (n=14)	36mg Q2W (n=9)
Increased Appetite	0.0%	15.9%	4	2	0	2	2	0

- GI related AEs were similar to placebo
  - Diarrhea: 9.5% vs. 11.1% (Pooled BIO89-100 vs. Placebo)
  - Nausea: 4.8% vs. 11.1% (Pooled BIO89-100 vs. Placebo)
  - Vomiting: 0.0% vs. 0.0% (Pooled BIO89-100 vs. Placebo)
- No hypersensitivity AE reported; few mild injection site reaction events reported
- No tremor reported; no adverse effects on blood pressure or heart rate

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Phase 1b/2a NASH Open-label Histology Cohort Trial Design
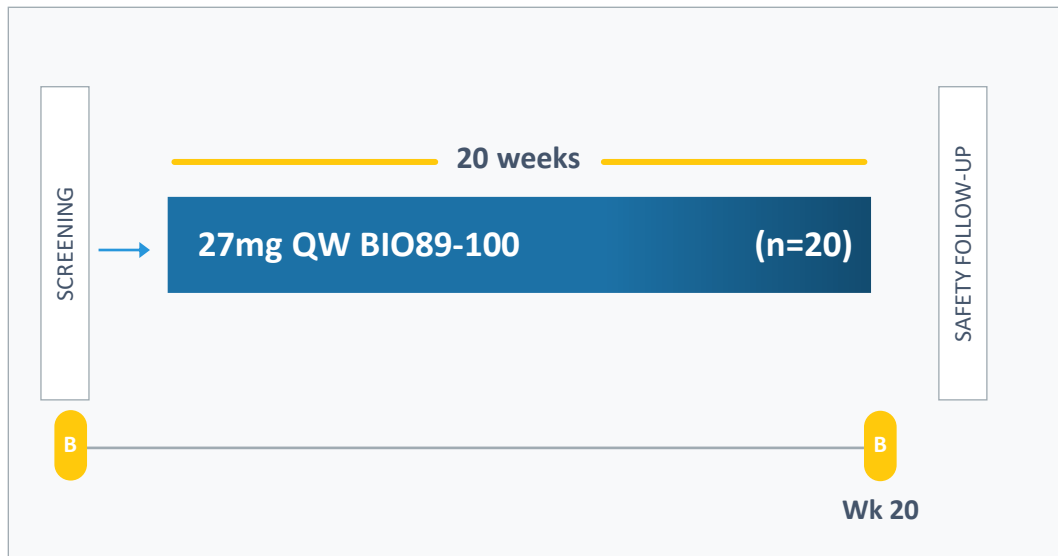
The Phase 1b/2a trial was expanded to include an additional cohort of biopsy-confirmed NASH patients

KEY INCLUSION CRITERIA

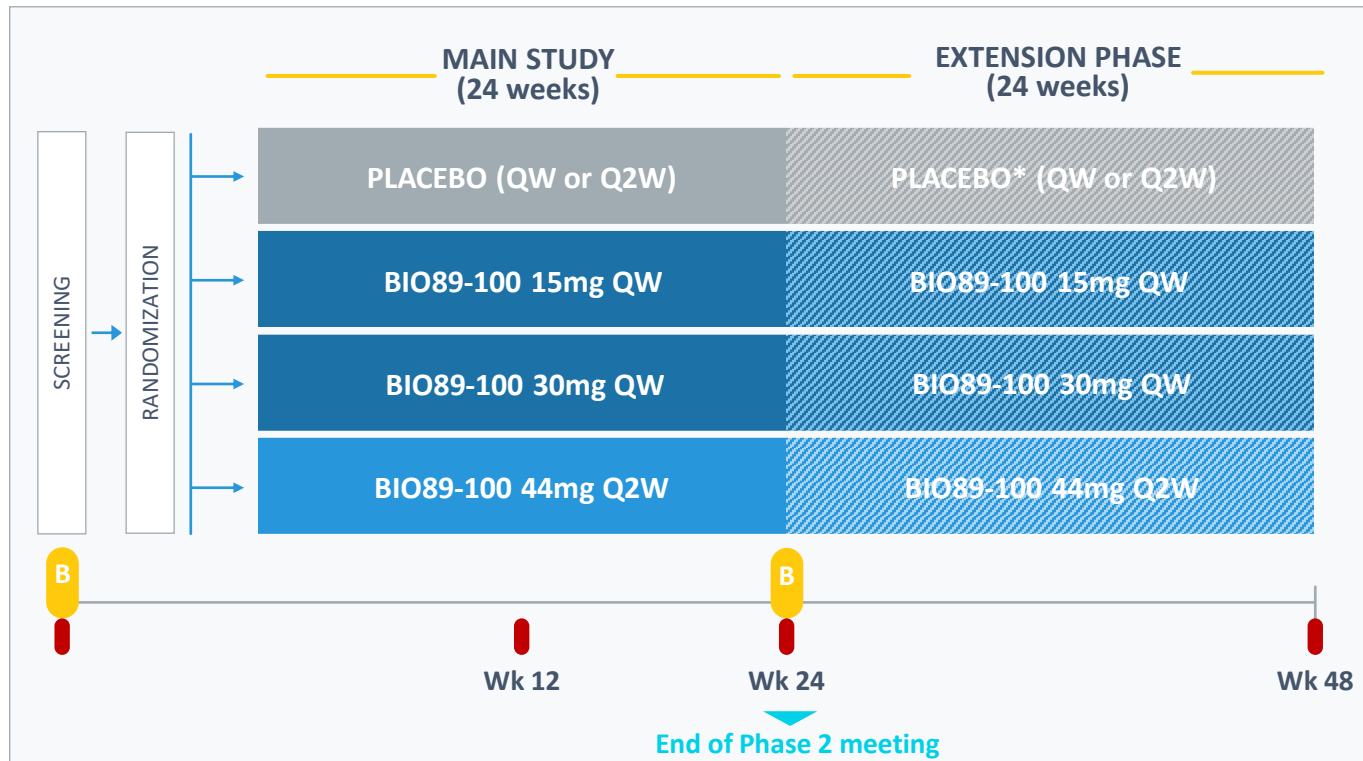- F2-F3* NASH; NAS ≥4
- MRI-PDFF ≥8%

PRIMARY ENDPOINT

- ≥2 improvement in NAS
- Safety/tolerability

KEY SECONDARY ENDPOINTS

- Fibrosis Improvement
- NASH Resolution
- Liver fat (MRI-PDFF)
- Non-invasive tests

Phase 2b (ENLIVEN) NASH Trial Design

MAIN STUDY (24 weeks) — **EXTENSION PHASE (24 weeks)**

SCREENING → RANDOMIZATION →

PLACEBO (QW or Q2W)	PLACEBO* (QW or Q2W)
BIO89-100 15mg QW	BIO89-100 15mg QW
BIO89-100 30mg QW	BIO89-100 30mg QW
BIO89-100 44mg Q2W	BIO89-100 44mg Q2W

Wk 12 — Wk 24 — Wk 48

End of Phase 2 meeting

B = Liver Biopsy · = MRI-PDFF

KEY INCLUSION CRITERIA

- F2-F3 NASH; NAS ≥4
- MRI-PDFF ≥8%

PRIMARY ENDPOINTS

- Fibrosis Improvement
- NASH Resolution

OTHER ENDPOINTS

- Other histological endpoints
- NITs – Pro-C3, ELF, FIB-4
- cT1
- Lipid and metabolic assessments
- Liver fat (MRI-PDFF)
- Safety

ENLIVEN (n = 216) will use a liquid formulation of BIO89-100

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* Some placebo patients will be re-randomized in the extension phase to receive BIO89-100

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Comparative Profile of FGF21 Analogs

	BIO89-100	Efruxifermin	Pegbelfermin
Structure	• GlycoPEGylated FGF21	• Fc-fused FGF21	• PEGylated FGF21 (with non-native amino acid substitution)
Efficacy	• Significant effect on liver parameters • Robust impact on broad metabolic parameters • EFX demonstrated positive data in F4 patients		• Lower effects across all liver and metabolic parameters
Tolerability	• Well-tolerated at all doses • Placebo-like GI profile • No tremors	• High frequency and withdrawals from GI events in all 3 clinical studies • Tremors observed in MAD and Phase 2a studies	• Similar to BIO89-100
Dosing Frequency	• Weekly and Every Two-Weeks	• Weekly	• Daily or Weekly
Phase 2b Drug Product	• Liquid	• Frozen	• Liquid
Development Timelines	• Phase 2b (F2/F3) initiated in 2Q21; PK study in F4 initiated in 3Q21	• Phase 2b (F2/F3) initiated in 1Q21; Phase 2b (F4) initiated in 3Q21	• Phase 2b (F3 and F4) complete - results pending

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Opportunity in SHTG

SHTG Market Is Large with Significant Unmet Need

LARGE PATIENT POPULATION

- Estimated **up to 4 million** patients
- Characterized by severely elevated **TG levels (≥ 500 mg/dL);** TGs are a type of non-cholesterol fat
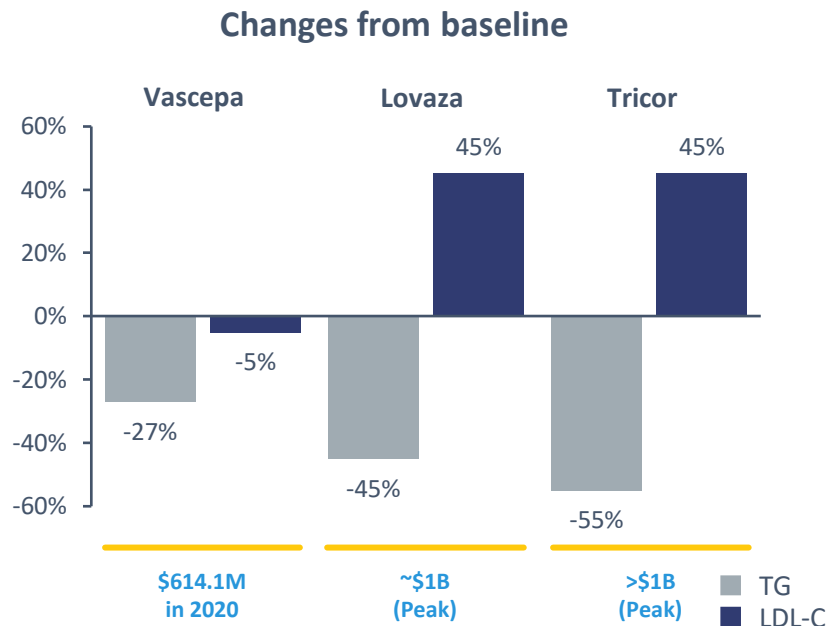
WITH HIGH UNMET NEED AND MULTIPLE CO-MORBIDITIES

- **Up to 50%*** of treated patients are refractory to current standard of care
- **56% of patients** have hepatic fat
- **Up to 70%** of patients have other dyslipidemias or Type 2 Diabetes

Primary research with physicians confirms unmet need and co-morbidities as above

Current Therapies Reached Blockbuster Status Despite Falling Short on Safety and Effect on Co-Morbidities

Changes from baseline

Vascepa: TG -27%, LDL-C -5%; $614.1M in 2020
Lovaza: TG -45%, LDL-C 45%; ~$1B (Peak)
Tricor: TG -55%, LDL-C 45%; >$1B (Peak)

Legend: TG (gray), LDL-C (dark blue)

	FISH OILS		FIBRATES
	Vascepa (EPA)	Lovaza (EPA+DHA)	Tricor
Reduce Hepatic Fat	-	-	-
Improve LDL-C	-	Worsens LDL	Worsens LDL
ALT	-	Warnings, Monitoring Required	
Glycemic Control	-	-	-
Tolerability/ Safety	May prolong bleeding time		Myopathy, Creatinine increases, DDI

− Unchanged or Inconclusive

- US approval endpoint: % change in TGs from baseline; no clinical outcomes study required
- Ph 3 trials precedent*: Single 12-wk trials with ~200-300 pts

Unlike other therapies, BIO89-100 addresses the broad metabolic issues in these patients

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

BIO89-100 Significantly Reduced Triglycerides with Greater Benefit Observed in Patients with High Triglycerides

Percentage Change from Baseline at Week 13 (All Patients)

QW: Placebo, 3mg, 9mg, 18mg, 27mg | Q2W: 18mg, 36mg

- Placebo: -2%
- 3mg (QW): -23%
- 9mg (QW): -24%*
- 18mg (QW): -18%
- 27mg (QW): -28%*
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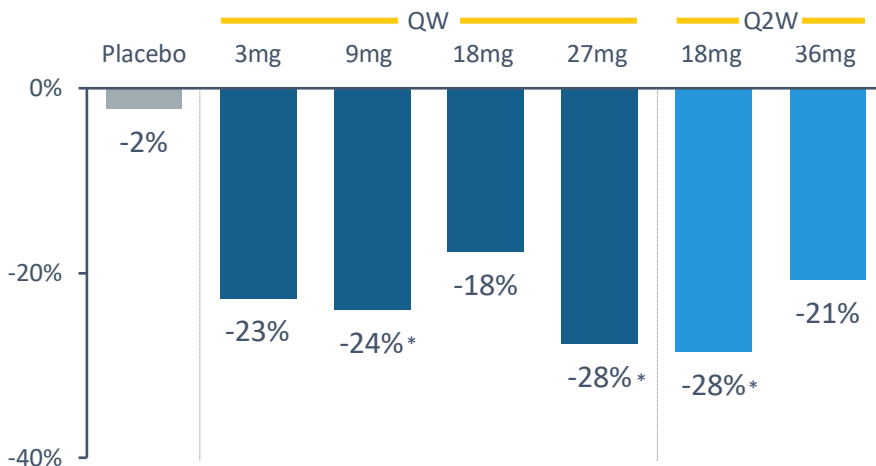
% change from baseline at week 13 (27mg QW dose)

Hepatic fat	-60%
LDL-C	-16%
HbA1c (absolute change)	-0.3

TG Normalization# Rate at week 13 (Subgroup with Baseline TG ≥200 mg/dL)
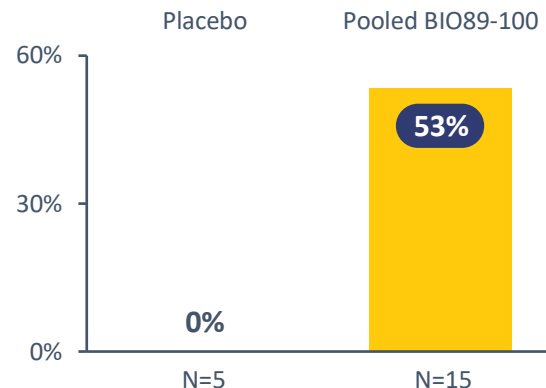
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Decrease from baseline in BIO89-100 treated subgroup with baseline TG ≥200 mg/dL
- TG: 33%-49%
- Non-HDL: 8%-29%

PD Analysis Set; MMRM LS Mean; * p<0.05; ** p<0.01; *** p<0.001 versus placebo; # TG <150 mg/dL

Physicians Research Showed Strong Interest in the Broad Metabolic Profile of BIO89-100 for Their SHTG Patients

BIO89-100 Preference Share (Under Different Profiles)

Reported Share*

- 27% — **30%** TG reduction as add on
- 40% — **50%** TG reduction as monotherapy

30% TG reduction as add on
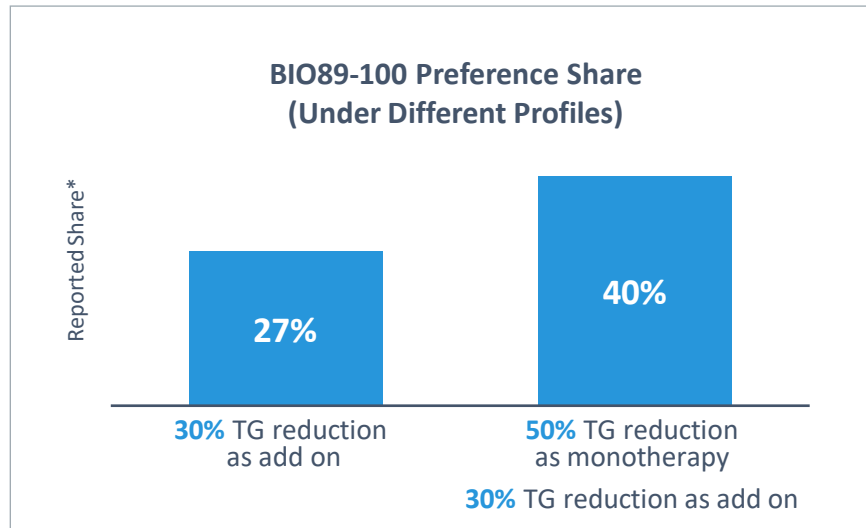
BIO89-100 Preference Share If Other Metabolic Benefits Observed

Parameter	Meaningful Chg. in Parameter	Share* for Meaningful Change + TG Reduction
Liver fat reduction	38%	**50% - 76%**
ALT normalization	40%	**48% - 74%**
LDL-C reduction	19%	**47% - 73%**

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ENTRIGUE – Phase 2 SHTG Trial Design

8 Weeks

PLACEBO	(n=18)
36mg Q2W BIO89-100	(n=18)
27mg QW BIO89-100	(n=18)
18mg QW BIO89-100	(n=18)
9mg QW BIO89-100	(n=18)

SCREENING → RANDOMIZATION → SAFETY FOLLOW-UP

Wk 8
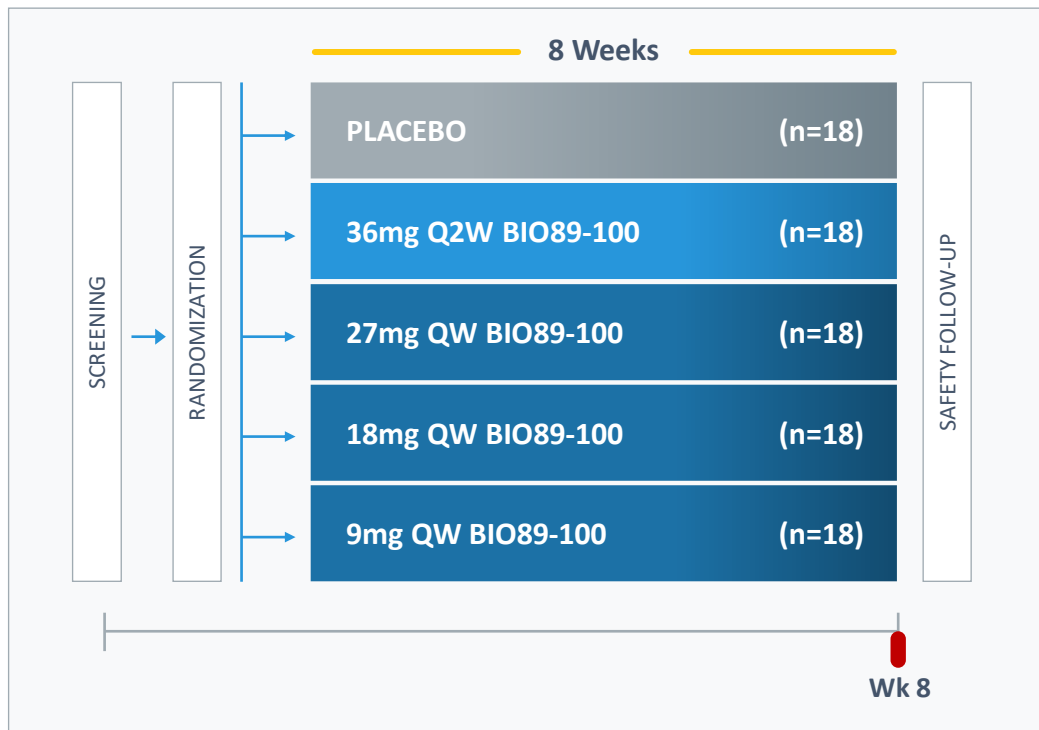
▮ % Chg in TGs from baseline

KEY INCLUSION CRITERIA

- TG ≥500 mg/dL and ≤2,000 mg/dL
- Background therapy of statins and/or prescription fish oil OR not on any background therapy

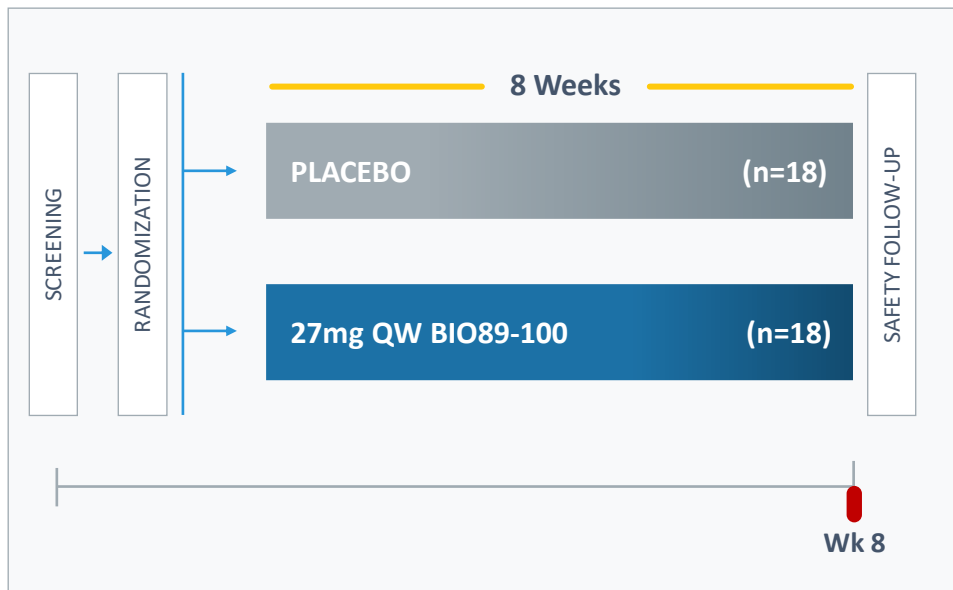## PRIMARY ENDPOINT

- % Change in TGs from baseline

KEY SECONDARY ENDPOINTS

- Other lipids and metabolic parameters
- Liver fat (MRI-PDFF)

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* Based on Vascepa and Epanova programs

ENTRIGUE – Phase 2 SHTG Fibrate Cohort Trial Design

8 Weeks

PLACEBO (n=18)

27mg QW BIO89-100 (n=18)

SCREENING

RANDOMIZATION

SAFETY FOLLOW-UP

Wk 8

% Chg in TGs from baseline

ENTRIGUE study was expanded to include an additional cohort of patients on fibrates

KEY INCLUSION CRITERIA

- TG ≥500 mg/dL and ≤2,000 mg/dL
- Background therapy of fibrates

PRIMARY ENDPOINT

- % Change in TGs from baseline

KEY SECONDARY ENDPOINTS

- Other lipids and metabolic parameters
- Liver fat (MRI-PDFF)

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Financial Position Summary

Cash, cash equivalents and short-term investments

$170.9 million (as of June 30, 2021)

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Achievements and Milestones

ACHIEVEMENTS (~3 Years)

- ✓ Significant progress in the clinic: SAD, Phase 1b/2a in NASH, Phase 2 in SHTG, additional cohorts ongoing in NASH/SHTG
- ✓ Completed key preclinical studies including long-term tox
- ✓ Manufacture product at CMO
- ✓ Liquid formulation
- ✓ IP through 2038
- ✓ Strong balance sheet

PROGRAM STATUS/MILESTONES

- Phase 2b (ENLIVEN) NASH (F2/F3) trial – Ongoing
- NASH histology cohort results – YE21
- PK study in NASH (F4) patients – Ongoing
- Topline results from Phase 2 (ENTRIGUE) SHTG trial – 1H22

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STRONG CAPITAL POSITION - $170.9M IN CASH, CASH EQUIVALENTS, AND SHORT-TERM INVESTMENTS (JUN 30, 2021)

ESTABLISHED MANUFACTURING EXPERTISE AND IP PROTECTION INTO 2038 AND BEYOND

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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

Ram Waisbourd
COO & CBO

20 years of operations, BD, and strategy experience

Ryan Martins
CFO

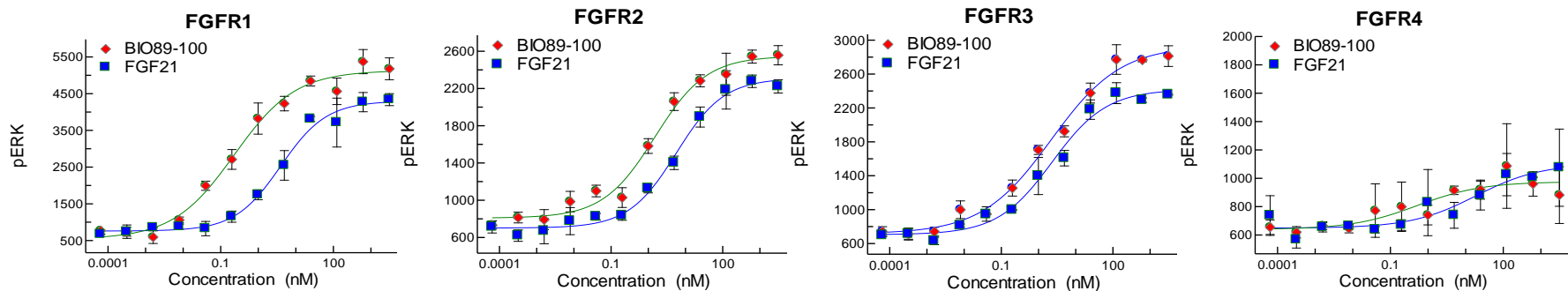CFO, Strategy/IR, finance, sell-side experience

Quoc Le-Nguyen
CTO & Head of Quality

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

BIO89-100 Exhibits Highly Potent FGF Receptor Agonism

FGFR1 — pERK vs Concentration (nM); BIO89-100, FGF21

FGFR2 — pERK vs Concentration (nM); BIO89-100, FGF21

FGFR3 — pERK vs Concentration (nM); BIO89-100, FGF21

FGFR4 — pERK vs Concentration (nM); BIO89-100, FGF21

- BIO89-100 has the potential to reproduce the beneficial metabolic effects of native FGF21

RECEPTOR	FGF21 EC_{50} (nM) Mean ± S.D.	BIO89-100 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 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

Baseline Characteristics

Parameter Mean or %	Placebo (n=19)	Pooled BIO89-100 (n=62)	3mg QW (n=6)	9mg QW (n=12)	18mg QW (n=11)	27mg QW (n=10)	18mg Q2W (n=14)	36mg Q2W (n=9)
Age (years)	52.6	51.7	56.1	49.5	51.5	52.0	51.2	52.5
Male/Female	36.8%	38.7%	16.7%	50%	27.3%	20%	28.6%	88.9%
Weight (kg)	93.6	93.6	87.9	87.2	87.1	94.0	101.5	101.1
BMI (kg/m²)	33.8	34.8	34.3	32.7	32.8	36.8	37.0	34.8
Type 2 Diabetes	63.2%	40.3%	83.3%	33.3%	63.6%	40.0%	21.4%	22.2%
ALT (U/L)	38.8	42.3	45.0	32.8	38.4	53.3	39.1	50.4
AST (U/L)	29.0	31.5	34.5	22.8	30.9	39.0	28.8	38.1
MRI-PDFF (%)	21.8	21.2	22.4	21.4	19.3	22.0	21.6	20.9

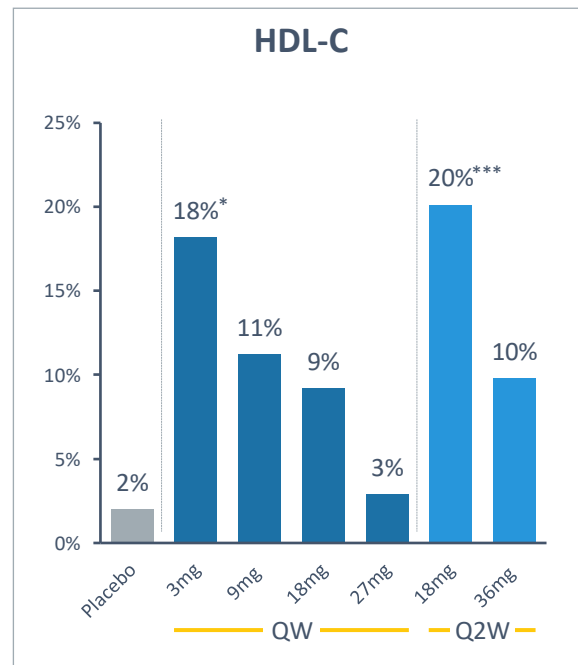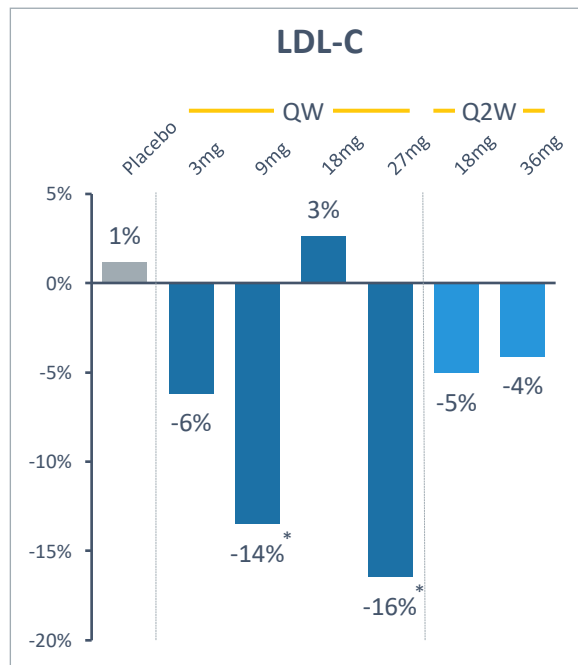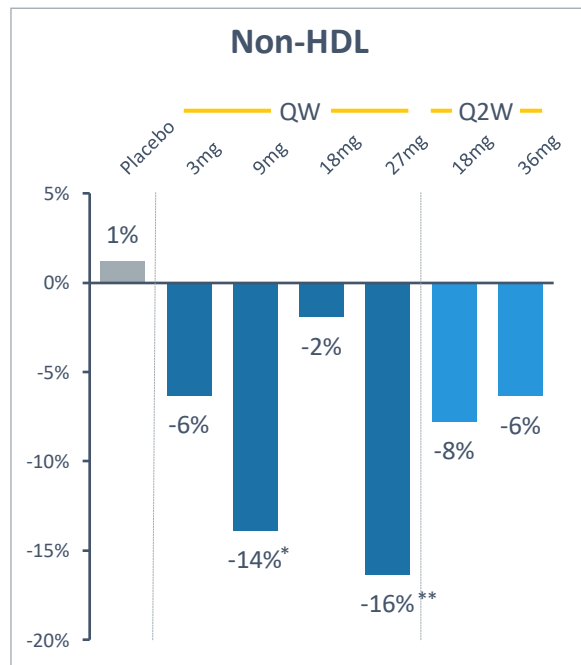Baseline characteristics were similar between NASH (n=15) and PNASH (n=66) patients

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Substantial Reduction in Liver Fat and Liver Volume Across Dose Groups
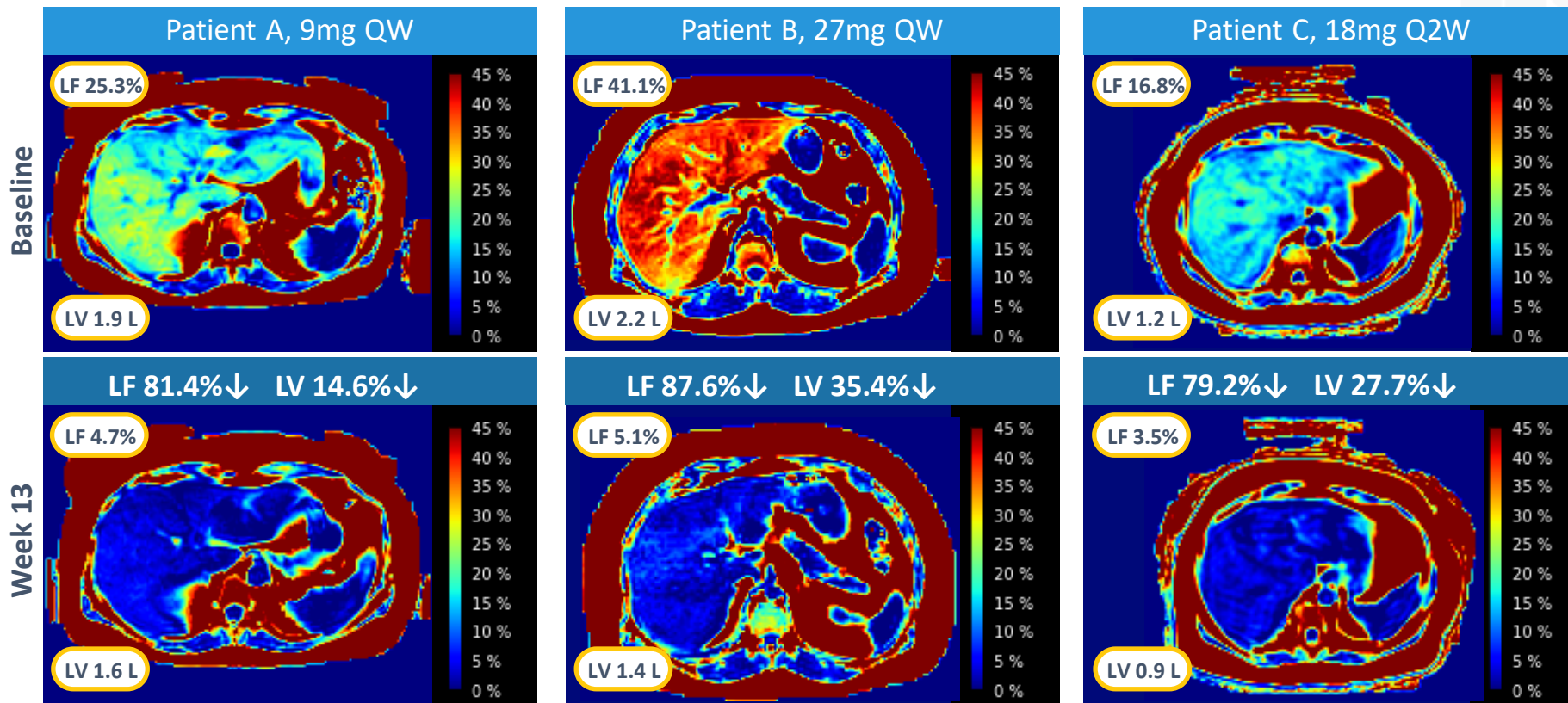
BIO89-100 Significantly Improves Key Lipid Markers

Percentage Change from Baseline At Week 13

PD Analysis Set; MMRM LS Mean; * p<0.05; ** p<0.01; *** p<0.001 versus placebo

BIO89-100 Effect on Glycemic Control

Change From Baseline At Week 13

	Placebo	3mg QW	9mg QW	18mg QW	27mg QW	18mg Q2W	36mg Q2W
Adiponectin % Change	-4.3%	37.7%*	25.5%*	29.1%*	60.9%***	23.1%*	24.1%
Insulin& % Change	10.0%	-8.5%	-9.4%	-22.5%	-6.9%	-39.7%	-34.5%
HbA1c (%) Absolute Change	<0.1	0.6	0.1	0.1	-0.3	-0.1	0.5

No meaningful changes in weight were observed, except in the 27 mg QW cohort that saw a significant percentage reduction in weight relative to placebo

Similar Baseline Characteristics in Patients with Biopsy-Proven NASH or PNASH

Parameter Mean or %	NASH (N=15)	PNASH (N=66)	Overall (N=81)
Age (years)	50.6	52.2	51.9
Male	20%	42.2%	38.3%
Weight (kg)	99.3	92.3	93.6
BMI (kg/m2)	35.4	34.4	34.6
Type 2 Diabetes	26.7%	50%	45.7%
ALT (U/L)	42.9	41.1	41.5
ALT > ULN (45 U/L)	26.7%	36.4%	34.6%
AST (U/L)	34.9	30.0	31.0

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BIO89-100 has Overall Efficacy Comparable to EFX and Superior to Pegbelfermin

KEY EFFICACY PARAMETERS	BIO89-100 (12 weeks)		EFRUXIFERMIN (16 weeks*)		PEGBELFERMIN (16 weeks)	
	All Doses	27mg QW	28mg QW	50mg QW	10mg QD	20mg QW
MRI-PDFF						
Relative reduction in fat vs. placebo (%)	47-70	70	63	71	32	20
≥30% Responder (%)	60-88	86	84	85	56	54
ALT % Chg. vs. Baseline	-17 to -44%	-44%	~-40%	~-50%	-33%	-22%
PRO-C3 % Chg. vs. Baseline	-1.1 to -28%	-28%	-34%	-27%	-30%	-19%
Adiponectin % Chg. vs. Baseline	+23 to +61%	+61%	+69%	+88%	+15%	+15%

- Emerging histology data with Efruxifermin appears superior to Aldafermin. BIO89-100 non-invasive data was similar to that of Efruxifermin

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* MRI-PDFF data is at 12 weeks
Note: All data regarding third-party studies on this slide are based 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.

BIO89-100 has Better Tolerability Profile Compared to EFX

SELECTED AEs	BIO89-100 (12 weeks)		EFRUXIFERMIN* (16 weeks)		PEGBELFERMIN (16 weeks)	
	Pooled	27 mg QW	28mg QW	50mg QW	20mg QW	10mg QD
	Treatment Related AEs		**Treatment Related AEs ≥10%**		**Most Frequent AEs**	
Diarrhea	9.5%	20%	26%	53%	21%	12%
Nausea	4.8%	0%	32%	21%	16%	13%
Vomiting	0.0%	0%	26%	11%	Present but % not reported	
Frequent Bowel Movement	3.2%	10%	16%	11%	0%	20%
Increased Appetite	15.9%	20%	21%	21%	Not reported	
Other	Drug Related D/C: Skin rash (1)		Drug Related D/C: Tremor (1); Acute pancreatitis (1); Nausea and/or vomiting (3)			

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FGF21 – Highly Differentiated Mechanism versus Leading Therapeutics in Development for NASH

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

✔ Effective   ? Indeterminate   ✔ Modest Effect   ☐ Unknown or Unchanged

* Based on pan-PPAR ** 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.

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