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): **September 29, 2022**

AXCELLA HEALTH INC.
(Exact name of registrant as specified in its charter)

Delaware	**001-38901**	**26-3321056**
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

840 Memorial Drive **Cambridge, Massachusetts**	**02139**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(857) 320-2200**

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 (see General Instruction A.2. below):

☐ 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, $0.001 Par Value	**AXLA**	**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 7.01 Regulation FD Disclosure.

On September 29, 2022, Axcella Health Inc. (the "Company" or "Axcella") issued a press release announcing interim data from its Phase 2b clinical trial of AXA1125 for the treatment of Nonalcoholic Steatohepatitis (NASH) entitled "Axcella Announces Positive Interim Data from Phase 2b EMMPACT Study of AXA1125 in Nonalcoholic Steatohepatitis (NASH)." The Company also hosted a conference call to discuss the interim data on Thursday, September 29, 2022 at 8:00 a.m. Eastern Time. Copies of the press release and presentation are attached as Exhibits 99.1 and 99.2, respectively, to this Current Report on Form 8-K and are incorporated herein by reference.

The information in this Item 7.01 and Exhibits 99.1 and 99.2 attached hereto shall not be deemed "filed" for purposes of Section 18 of the Securities and Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section, nor shall they be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such filing.

Item 8.01 Other Events.

On September 29, 2022, the Company reported interim results from the ongoing global Phase 2b randomized, double-blind, placebo-controlled, dose ranging EMMPACT study to evaluate the safety, tolerability, and efficacy of AXA1125 for the treatment of NASH. These interim results report findings regarding the effects of AXA1125 administration on selected outcome measures after 12 and 24 weeks of treatment.

This interim analysis was preplanned to be conducted when enrollment reached 30% of the target of 270 subjects with biopsy confirmed stage 2 or 3 NASH across all trial arms. Data from this ongoing blinded study included 82 subjects at week 12 and 58 subjects at week 24; approximately half of the subjects have type 2 diabetes mellitus (T2DM). In addition to effects on hepatic fat and alanine aminotransferase (ALT), previously reported in 2 other studies, this study also included vibration controlled transient elastography (FibroScan), a widely accepted and accessible non-invasive test (NIT) that assesses both liver fat and stiffness. Specifically, the study examines liver stiffness, changes of which have been correlated with improvements in liver fibrosis and outcomes in clinical studies. Study participants were randomized 1:1:1 to receive either a placebo or 22.6g or 33.9g of AXA1125 twice daily.

At 24-weeks there were statistically significant improvements in the liver stiffness measurement (LSM) compared to placebo in the high dose arm for all subjects. Absolute changes in LSM were 0.13, -2.01, and -4.07 kilopascals (kPa) in the placebo, low dose and high dose arms, respectively (p= 0.0992 and 0.0096 for the low and high dose, respectively, compared to placebo). These results were supported by statistically significant improvements in other NITs of liver fibrosis: ELF and FIB-4. Statistically significant improvements in ALT were seen at both weeks 12 and 24 in all subjects (placebo-adjusted difference of -28.61% (p=0.0183) and -36.3% (p=0.0017) for the low and high doses, respectively). All subjects experienced significantly greater changes from baseline in MRI-PDFF at 12-weeks compared to the change from baseline in the placebo group (placebo adjusted difference of -18.98% (p=0.0082) and -21.24% (p=0.0014) for the low and high doses, respectively). Numerical trends of improvement relative to placebo in PDFF were seen at week 24 but these were not statistically significant in the small number of subjects. Overall, these positive results confirm AXA1125's multi-targeted impact, a differentiated approach to directly and simultaneously targeting multiple pathways that are dysregulated in NASH. Consistent with previous results, AXA1125 was found to be very safe and well-tolerated in this study. Both dose levels are active and will be continued. Consistent with prior clinical trials, T2DM showed results comparable to non-diabetics.

Cautionary Note Regarding Forward-Looking Statements

This Form 8-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including, without limitation, the potential for AXA1125 to serve as a first-line treatment option. The words "may," "will," "could," "would," "should," "expect," "plan," "anticipate," "intend," "believe," "estimate," "predict," "project," "potential," "continue," "target" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Any forward-looking statements in this Form 8-K are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this Form 8-K, including, without limitation, those related to the potential impact of COVID-19 on the Company's ability to conduct and complete its ongoing or planned clinical studies and clinical trials in a timely manner or at all due to patient or principal investigator recruitment or availability challenges, clinical trial site shutdowns or other interruptions and potential limitations on the quality, completeness and interpretability of data the Company is able to collect in its clinical trials of AXA1125, other potential impacts on the Company's business and financial results, including with respect to its ability to raise additional capital and operational disruptions or delays, changes in law, regulations, or interpretations and enforcement of regulatory guidance, whether data readouts support the Company's clinical trial plans and timing, clinical trial design and target indications for AXA1125, the clinical development and safety profile of AXA1125 and its therapeutic potential, whether and when, if at all, the Company's product candidates will receive approval from the FDA or other comparable regulatory authorities, potential competition from other biopharma companies in the Company's target indications, and other risks identified in the company's SEC filings, including Axcella's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and subsequent filings with the SEC. The Company cautions you not to place undue reliance on any forward-looking statements, which speak only as of the date they are made. Axcella disclaims any obligation to publicly update or revise any such statements to reflect any change in expectations or in events, conditions or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements. Any forward-looking statements contained in this Form 8-K represent the company's views only as of the date hereof and should not be relied upon as representing its views as of any subsequent date. The Company explicitly disclaims any obligation to update any forward-looking statements.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description
99.1	Press Release dated September 29, 2022 entitled "Axcella Announces Positive Interim Data from Phase 2b EMMPACT Study of AXA1125 in Nonalcoholic Steatohepatitis (NASH)"
99.2	Presentation of Axcella Health, Inc., doing business as "Axcella Therapeutics," dated September 29, 2022
104	Cover Page Interactive Data (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.

AXCELLA HEALTH INC.

Date: September 29, 2022

By: /s/ William R. Hinshaw, Jr.
William R. Hinshaw, Jr.
Chief Executive Officer, President and Director

Exhibit 99.1

Axcella Announces Positive Interim Data from Phase 2b EMMPACT Study of AXA1125 in Nonalcoholic Steatohepatitis (NASH)

Subjects enrolled with biopsy confirmed NASH experienced clinically and statistically significant improvements in liver stiffness as measured by FibroScan, a non-invasive measure of liver fibrosis

Subjects with NASH experienced clinically and statistically significant improvements in alanine aminotransferase (ALT), a measure of liver cell inflammation, at both dose levels of AXA1125

Findings demonstrate improvement in hepatic fat as measured by MRI-PDFF

AXA1125 continues to demonstrate a safe and well tolerated profile

Axcella to host a conference call today at 8:00 a.m. ET; To register, click here

CAMBRIDGE, Mass. – Sept. 29, 2022 – Axcella Therapeutics (Nasdaq: AXLA), a clinical-stage biotechnology company pioneering a new approach to treat complex diseases using multi-targeted endogenous metabolic modulator (EMM) compositions, today reported interim results from their ongoing global Phase 2b randomized, double-blind, placebo-controlled, dose ranging EMMPACT study to evaluate the safety, tolerability, and efficacy of AXA1125 for the treatment of NASH. These interim results report findings regarding the effects of AXA1125 administration on selected outcome measures after 12- and 24-weeks of treatment.

This interim analysis was preplanned to be conducted when enrollment reached 30% of the target of 270 subjects with biopsy confirmed stage 2 or 3 NASH across all trial arms. Data from this ongoing blinded study included 82 subjects at week 12 and 58 subjects at week 24; approximately half of the subjects have type 2 diabetes mellitus (T2DM). In addition to effects on hepatic fat and ALT, previously reported in 2 other studies, this study also included vibration controlled transient elastography (FibroScan), a widely accepted and accessible non-invasive test (NIT) that assesses both liver fat and stiffness. Specifically, the study examines liver stiffness, changes of which have been correlated with improvements in liver fibrosis and outcomes in clinical studies. Study participants were randomized 1:1:1 to receive either a placebo or 22.6g or 33.9g of AXA1125 twice daily.

At 24-weeks there were statistically significant improvements in the liver stiffness measurement (LSM) compared to placebo in the high dose arm for all subjects. Absolute changes in LSM were 0.13, -2.01, and -4.07 kilopascals (kPa) in the placebo, low dose and high dose arms, respectively (p= 0.0992 and 0.0096 for the low and high dose, respectively, compared to placebo). These results were supported by statistically significant improvements in other NITs of liver fibrosis: ELF and FIB-4. Statistically significant improvements in ALT were seen at both weeks 12 and 24 in all subjects (placebo-adjusted difference of -28.61% (p=0.0183) and -36.3% (p=0.0017) for the low and high doses, respectively). All subjects experienced significantly greater changes from baseline in MRI-PDFF at 12-weeks compared to the change from baseline in the placebo group (placebo adjusted difference of -18.98% (p=0.0082) and -21.24% (p=0.0014) for the low and high doses, respectively). Numerical trends of improvement relative to placebo in PDFF were seen at week 24 but these were not statistically significant in the small number of subjects. Overall, these positive results confirm AXA1125's multi-targeted impact, a differentiated approach to directly and simultaneously targeting multiple pathways that are dysregulated in NASH. Consistent with previous results, AXA1125 was found to be very safe and well-tolerated in this study. Both dose levels are active and will be continued. Consistent with prior clinical trials, T2DM showed results comparable to non-diabetics.

“We find the results from this 12- and 24-week interim analysis to be extremely encouraging,” commented Axcella CEO Bill Hinshaw. “They indicate that administration of AXA1125 over 24-weeks leads to statistically significant improvements compared to placebo in biomarkers for metabolism, inflammation and fibrosis, underscoring its multi-targeted efficacy. Given AXA1125’s market leading safety and tolerability profile, and its oral dosing, these findings position AXA1125 as an attractive candidate for first line treatment of NASH. We look forward to the continuation of the trial and gathering the data from the complete patient population. We expect to report the topline, 48-week biopsy results in the first half of 2024.”

Dr. Margret Koziel, Chief Medical Officer of Axcella remarked that “The positive change in liver stiffness at 24-weeks at both dose levels suggests that AXA1125 administration is correlated with improvement in fibrosis, which is the major histologic finding associated with liver disease mortality. This, in concert with effects on hepatic fat and inflammation, provides significant confidence in our ability to demonstrate improvements in liver histology at the end of this study.” NASH expert, Dr. Stephen Harrison, added: “I find these results to be very promising. NASH is a complex condition that must be addressed by modulating multiple pathways. Axcella’s multi-targeted approach is well-suited to playing an important role in addressing the challenges posed by the condition, and these preliminary results offer further support for this therapeutic strategy. Moreover, AXA1125 has a very favorable risk-benefit profile given its impact on disease activity and its high level of safety, creating an opportunity for a frontline treatment option in NASH.”

Internet Posting of Information

Axcella uses the “Investors and News” section of its website, www.axcellatx.com, as a means of disclosing material nonpublic information, to communicate with investors and the public, and for complying with its disclosure obligations under Regulation FD. Such disclosures include, but may not be limited to, investor presentations and FAQs, Securities and Exchange Commission filings, press releases, and public conference calls and webcasts. The information that we post on our website could be deemed to be material information. As a result, we encourage investors, the media and others interested to review the information that we post there on a regular basis. The contents of our website shall not be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended.

About Axcella Therapeutics (Nasdaq: AXLA)

Axcella is a clinical-stage biotechnology company pioneering a new approach to treat complex diseases using compositions of endogenous metabolic modulators (EMMs). The company’s product candidates are comprised of EMMs and derivatives that are engineered in distinct combinations and ratios to restore cellular homeostasis in multiple key biological pathways and improve cellular energetic efficiency. Axcella’s pipeline includes lead therapeutic candidates in Phase 2 development for the treatment of Long COVID and non-alcoholic steatohepatitis (NASH). The company’s unique model allows for the evaluation of its EMM compositions through non-IND clinical studies or IND clinical trials. For more information, please visit www.axcellatx.com.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including, without limitation, the potential for AXA1125 to serve as a first-line treatment option. The words "may," "will," "could," "would," "should," "expect," "plan," "anticipate," "intend," "believe," "estimate," "predict," "project," "potential," "continue," "target" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Any forward-looking statements in this press release are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this press release, including, without limitation, those related to the potential impact of COVID-19 on the company's ability to conduct and complete its ongoing or planned clinical studies and clinical trials in a timely manner or at all due to patient or principal investigator recruitment or availability challenges, clinical trial site shutdowns or other interruptions and potential limitations on the quality, completeness and interpretability of data the company is able to collect in its clinical trials of AXA1125, other potential impacts on the company's business and financial results, including with respect to its ability to raise additional capital and operational disruptions or delays, changes in law, regulations, or interpretations and enforcement of regulatory guidance, whether data readouts support the company's clinical trial plans and timing, clinical trial design and target indications for AXA1125, the clinical development and safety profile of AXA1125 and their therapeutic potential, whether and when, if at all, the company's product candidates will receive approval from the FDA or other comparable regulatory authorities, potential competition from other biopharma companies in the company's target indications, and other risks identified in the company's SEC filings, including Axcella's Annual Report on Form 10-K, Quarterly Report on Form 10-Q and subsequent filings with the SEC. The company cautions you not to place undue reliance on any forward-looking statements, which speak only as of the date they are made. Axcella disclaims any obligation to publicly update or revise any such statements to reflect any change in expectations or in events, conditions, or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements. Any forward-looking statements contained in this press release represent the company's views only as of the date hereof and should not be relied upon as representing its views as of any subsequent date. The company explicitly disclaims any obligation to update any forward-looking statements.

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NASDAQ: AXLA
AXA1125-101
Interim Analysis
September 29, 2022
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Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, inclu limitation, statements regarding the characteristics, competitive position and development potential of AXA1125 and potential future EMM composit AXA1125 to serve as a treatment for Long COVID and a first-line NASH monotherapy for adult and pediatric patients and be used in combination with required, the design, status and timing of the company's Phase 2a and Phase 2b clinical trials of AXA1125, the intended results of the company's strat size and growth potential of the markets for the company's product candidates, the company's intellectual property position, the company's cash run company's ability to address other complex diseases and conditions utilizing EMM compositions. The words "may," "will," "could," "would," "should," "anticipate," "intend," "believe," "estimate," "predict," "project," "potential," "continue," "target" and similar expressions are intended to identify forw statements, although not all forward-looking statements contain these identifying words. Any forward-looking statements in this presentation are ba current expectations and beliefs and are subject to a number of risks, uncertainties and important factors that may cause actual events or results to d those expressed or implied by any forward-looking statements contained in this presentation, including, without limitation, those related to the poten 19 or other events on our ability to conduct and complete ongoing or planned clinical studies and clinical trials and planned submissions to FDA or oth authorities in a timely manner or at all due to patient or principal investigator recruitment or availability challenges, clinical trial site shutdowns or ot potential limitations on the quality, completeness and interpretability of data we are able to collect in our clinical studies and potential delays in discl other potential impacts of COVID-19 or other events on our business and financial results, including with respect to our ability to raise additional capi disruptions or delays, changes in law, regulations, or interpretations and enforcement of regulatory guidance; clinical trial initiation plans and timing, and target indication(s) for AXA1125, the clinical development and safety profile of our product candidates and their health or therapeutic potential; at all, our product candidates will receive approval from the FDA or other comparable regulatory authorities, and for which, if any, indications; compe biotechnology companies; past results from clinical studies not being representative of future results and other risks identified in our SEC filings, inclu Report on Form 10-K, Quarterly Report on Form 10-Q and subsequent filings with the SEC. The company cautions you not to place undue reliance on d statements, which speak only as of the date they are made. Axcella disclaims any obligation to publicly update or revise any such statements to reflec expectations or in events, conditions or circumstances on which any such statements may be based, or that may affect the likelihood that actual resul those set forth in the forward-looking statements. Any forward-looking statements contained in this presentation represent our views only as of the d not be relied upon as representing its views as of any subsequent date.

Today's Agenda

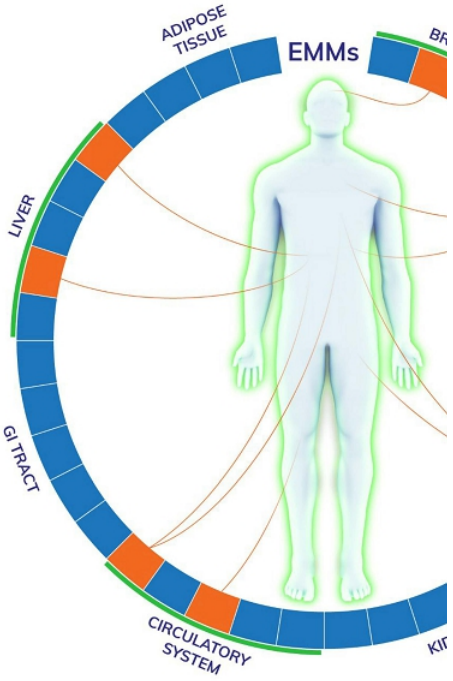
Agenda	Length	Time	Speakers
Introductory Remarks	10 min	8:00 am – 8:10 am	Bill Hinshaw
Clinical Trial Design & Results	20 min	8:10 am – 8:30 am	Margaret Koziel
Mechanism of AXA1125	10 min	8:30 am – 8:40 am	Karim Azer
Clinical Relevance and Landscape	15 min	8:40 am – 8:55 am	Dr. Harrison
Closing Remarks	5 min	8:55 am – 9:00 am	Bill Hinshaw
Q&A	15 min	9:00 am – 9:15 am	Bill, Margaret, Karim, Dr. Harrison, Bob

Dr. Stephen Harrison
Medical Director for Pinnacle Cli
President of Summit Clinical Res

Multi-Targeted Therapeutics to Restore Homeostasis

Leveraging Endogenous Metabolic Modulator (EMM) compositions to treat complex medical

- Complex conditions are driven by dysregulation in multiple biological pathways, limiting the effect of single-targeted therapies
- Amino acid-based therapeutics can be safely used to:
  - Regulate key signaling pathways
  - Restore mitochondrial function
  - Shift substrate/redox balance to restore homeostasis
- Potential therapeutic benefits include:
  - Enhancing muscle function
  - Correcting metabolism
  - Decreasing inflammation
  - Improving neurocognition
  - Rebalancing IEMs
  - Reducing fibrosis



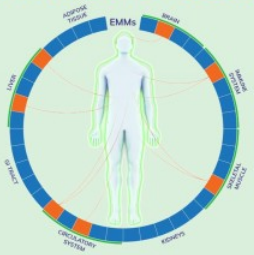
Axcella's clinical data demonstrate the potential to harness the power of EMMs to tackle complex chronic conditions

IEM = Inborn Errors of Metabolism

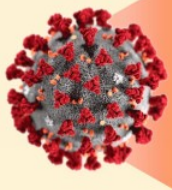
World leader of multi-targeted therapies in complex disea

axcella®

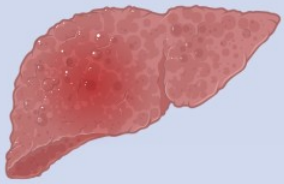
Endogenous Metabolic Modulators (EMMs)



Long COVID



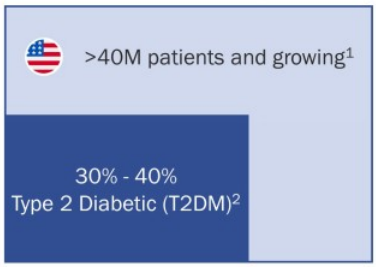
Non-Alcoholic Steatohepatitis (NASH)



NASH is a Complex Disease, Affecting Millions

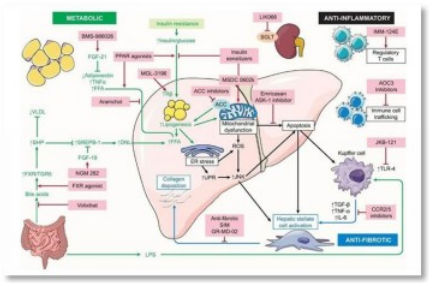
Given the Complexity of NASH, treatment options with different profiles will be required to adequately address broa population

State of the NASH Market



- Expected to be the leading liver transplant cause this year
- U.S. market expected to reach at least $8 billion by 2027[3]
- Approximately 10% of U.S. children are estimated to have NASH[1]
- No Approved Therapies

Complexity of NASH



- NASH disease pathogenesis involves many interacting pathways
- Due to complexity of disease, single targeted mechanisms have limitations

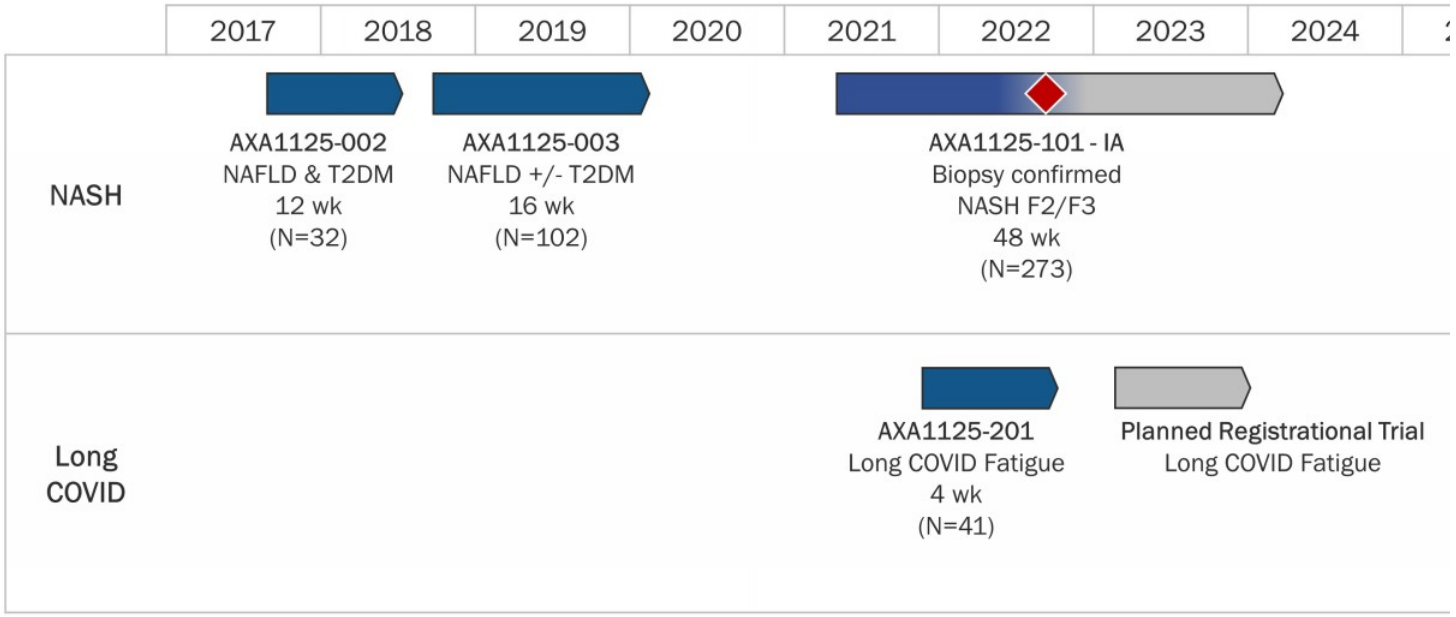
Need for Op

- Heterogeneous patier
- Very limited pediatric activity
- Combination/Add-on area of focus

1. Global Liver Institute U.S. NASH Action Plan (Dec. 2020).
2. Cusi K. *Diabetologia*. 2016;59:1112-20.
3. Company estimates based on Decision Resources Group (DRG). Non-alcoholic Steatohepatitis Landscape & Forecast. DRG.

AXA1125 Has Demonstrated Positive Data Across Multipl

AXA1125 has been studied in 4 clinical trials between NASH and Long COVID indications



F2/F3= stages of NASH fibrosis; NAFLD=non-alcoholic fatty disease; N=number of subjects; T2DM=type 2 diabetes mellitus; wk=weeks

AXA1125-101 Key Results of Interim Analysis

AXA1125 continues to demonstrate real biological impact and effect in NASH subjects

1. Significant Improvement in Liver Stiffness at 24 weeks

2. Reproduced Improvements in Liver Fat and Inflammation[1]

3. Demons Potential Safety Tolerabilit

1. Harrison SA, et al. *Am J Gastroenterol*. 2021:116;2399-2409.

AXA1125: A Differentiated Product with a Potential Frontline P

Elements Supporting a Frontline Profile: AXA1125

Potential Additional AXA1125 D

- Type 2 Diabetics
- Planning for pediatric dev
- Amenable to combinatio

MoA = mechanism of action.

Clinical Trial Design & Results

Dr. Margaret Koziel

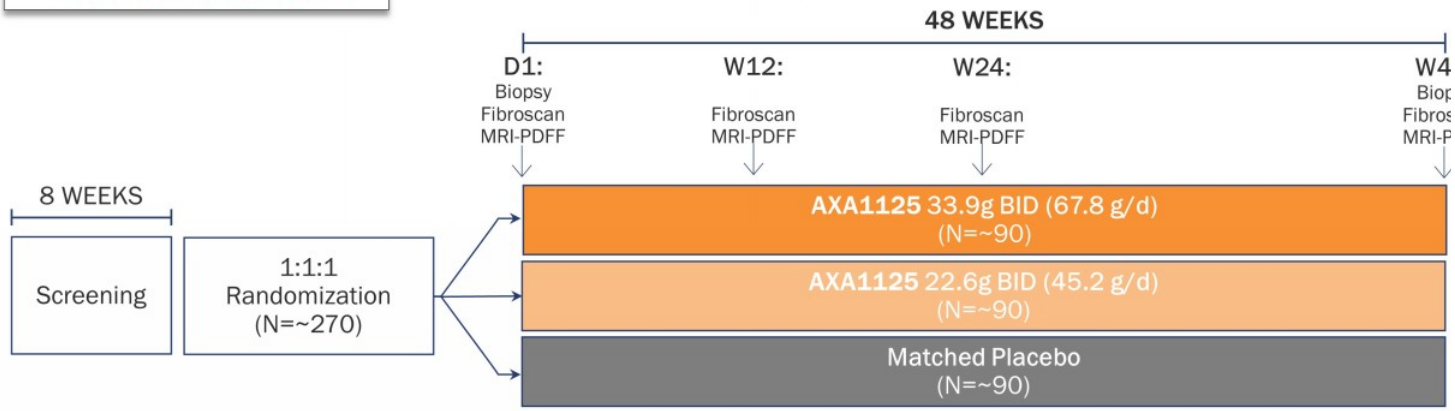
Chief Medical Officer

axcella

EMMPACT℠
NASH CLINICAL TRIAL

Phase 2b Clinical Trial Underway

Preplanned interim analysis when 30 subjects/arm reached weel

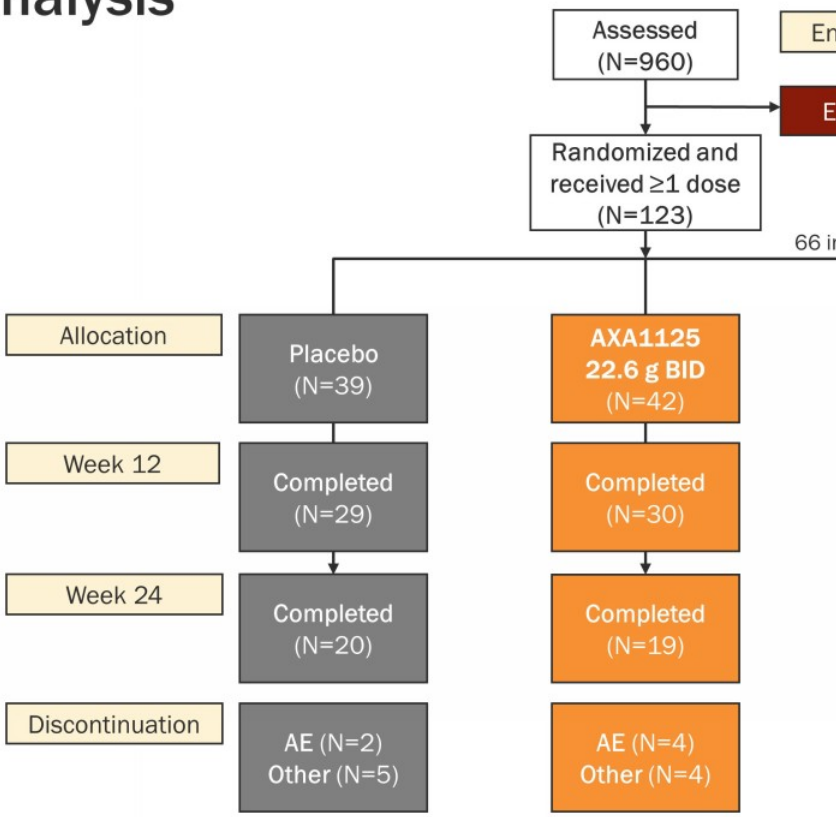


Core elements	Description
Design	• Randomized, double-blind, placebo-controlled, dose-ranging study over 48 weeks
Study population	• Biopsy-proven F2/F3 NASH with NAS≥4 • Stratification by type 2 diabetes status
Preplanned IA on secondary endpoints	• Improvement in non-invasive markers, including MRI-PDFF, ALT and Fibroscan

ALT=alanine aminotransferase; BID=twice a day; D=day; IA=interim analysis; MRI-PDFF=magnetic resonance imaging of the hepatis proton density fat fraction; N=number of subjects; NAS=NAFLD Activity Sc

Subject Flow and Data Analysis

- 123 subjects randomized and received at least one dose
- 82 subjects completed the study through week 12
- 58 subjects completed the study through week 24
- Few subjects discontinued due to AEs



BID=twice a day; AE=adverse events; N=Number of Subjects

Patient Demographics and Baseline Metrics

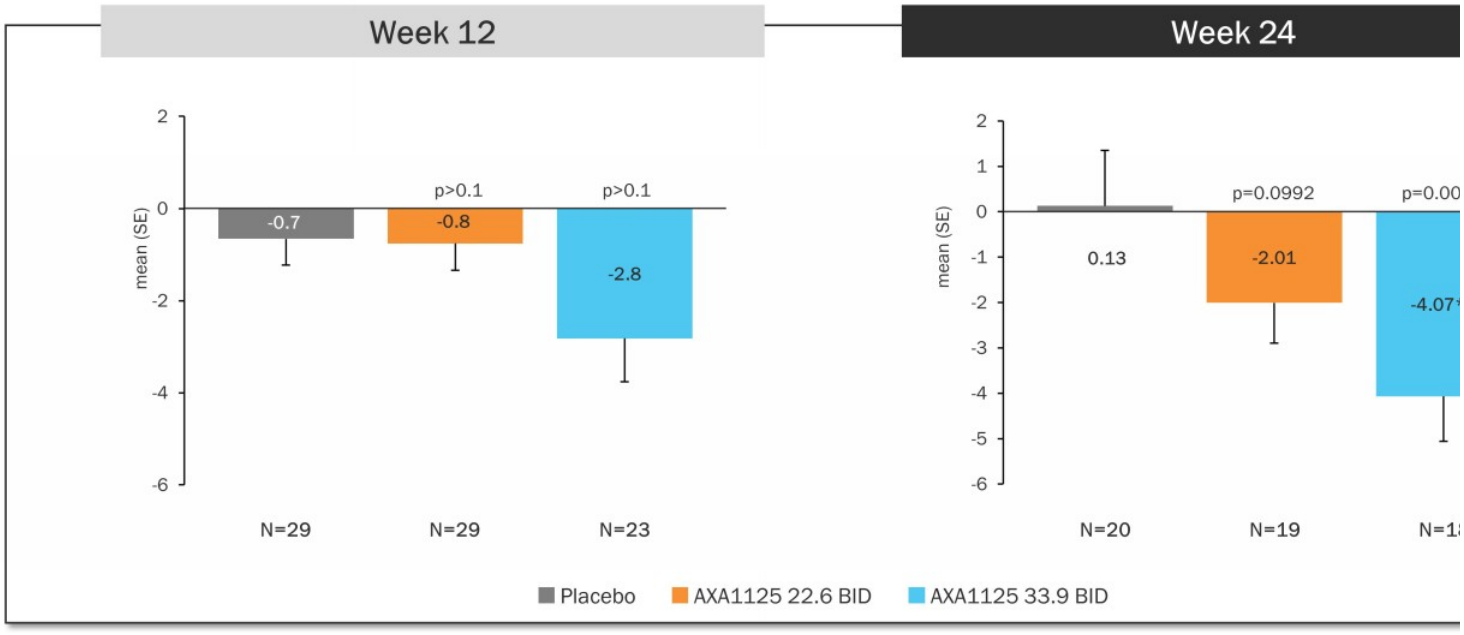
Baseline Demographic/Metric	Placebo (N=39)	AXA1125 22.6 BID (N=42)	AXA1125 (N=
Mean age in years (SD)	57.8 (9.8)	55.8 (13.5)	56.2 (
Sex			
Male, n (%)	12 (30.8)	10 (23.8)	19 (4
Female, n (%)	27 (69.2)	32 (76.2)	23 (5
Mean Body Mass Index, kg/m^2 (SD)	37.86 (7.78)	36.02 (7.08)	37.15
With Type 2 Diabetes, n (%)	22 (56.4)	24 (57.1)	24 (5
Metabolism			
Mean Liver Fat Content by MRI-PDFF, % (SD)	18.991 (7.885)	18.300 (7.547)	20.026
Mean HOMA-IR	13.561 (10.977)	12.455 (10.097)	12.244
HbA1c, % (SD)	6.79 (1.05)	6.43 (1.00)	6.49 (
Inflammation			
Mean ALT (U/L) (SD)	58.6 (34.3)	51.5 (24.2)	54.1 (
Fibrosis			
Mean Fibroscan score (kPa) (SD)	13.29 (6.72)	11.40 (3.47)	14.80
Mean Fib-4 (SD)	1.48 (0.65)	1.24 (0.58)	1.32 (
Mean ELF (SD)	9.966 (0.716)	9.636 (0.843)	10.012

ALT=alanine aminotransferase; BID= twice a day; ELF=enhanced liver fibrosis; Fib-4=Fibrosis-4; HbA1c=hemoglobin A1C; HOMA IR=homeostatic measure of insulin resistance; kPa=kilopascals; MRI-PDFF=
the hepatis proton density fat fraction; SD=standard deviation

Effects on Non-Invasive Measures

Significant Improvements in Liver Stiffness as Measured by Fib

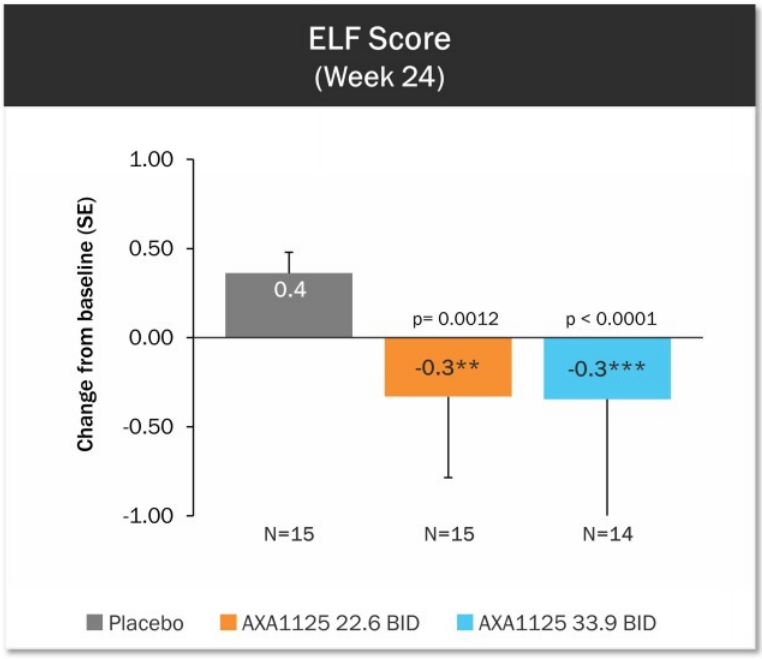
Consistent with prior data on fibrosis markers at week 16

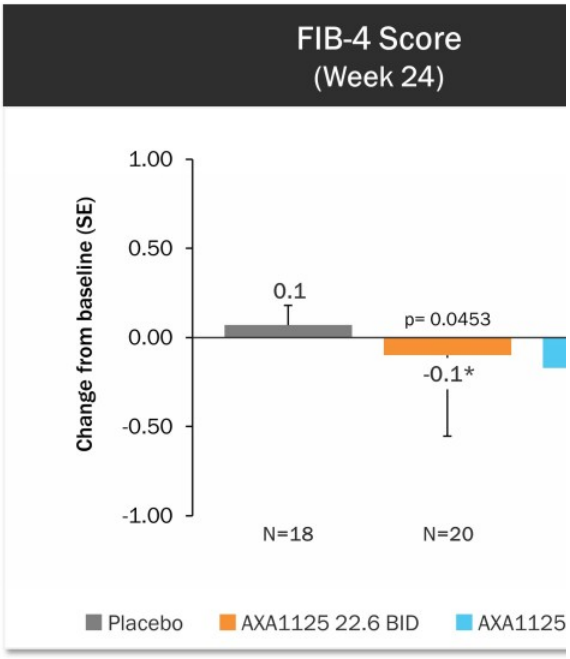


*p<0.05, **p<0.01, ***p<0.001, versus placebo; P values derived using mixed models approach. BID=twice a day; LSM=liver stiffness measurement; kPa=kilo pascals; SE=standard error; N=Number of Su

Blood Biomarkers Provide Further Evidence of Effect on F

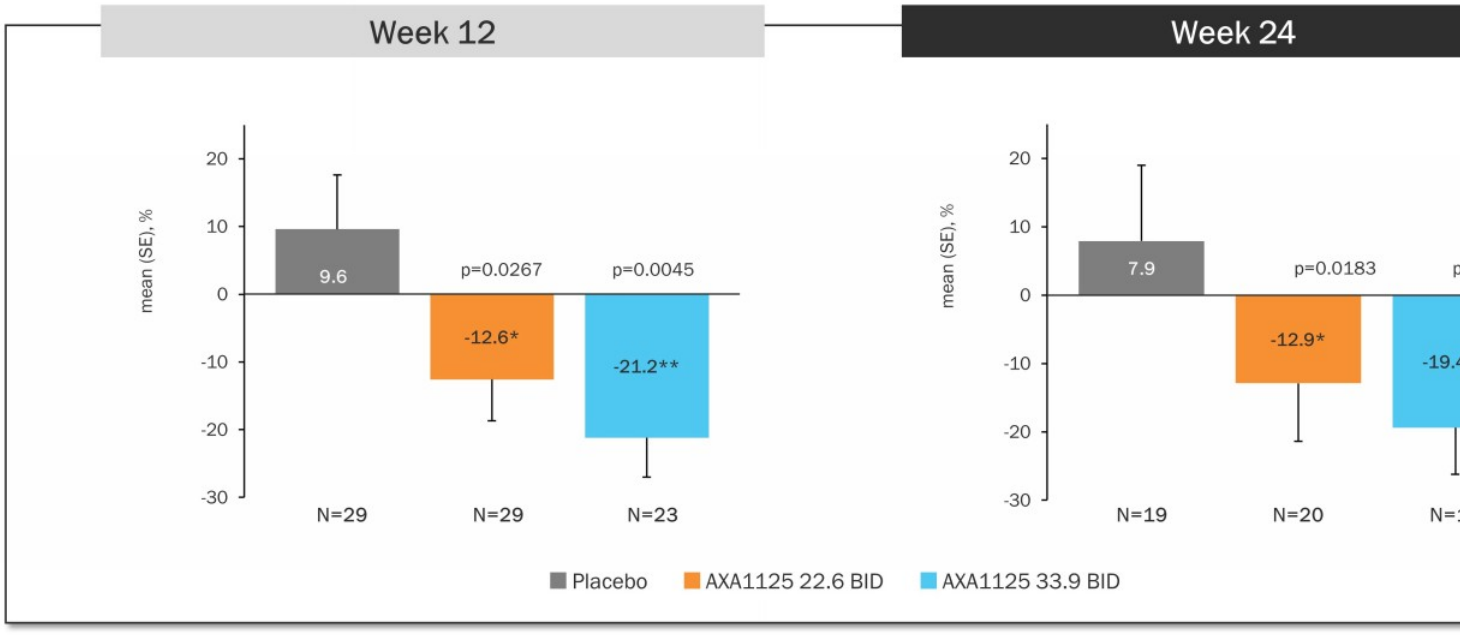
Statistically significant changes seen as early as week 12





*p<0.05, **p<0.01, ***p<0.001, versus placebo; p values derived using mixed models approach. BID=twice daily; N=Number of Subjects; SE=standard error

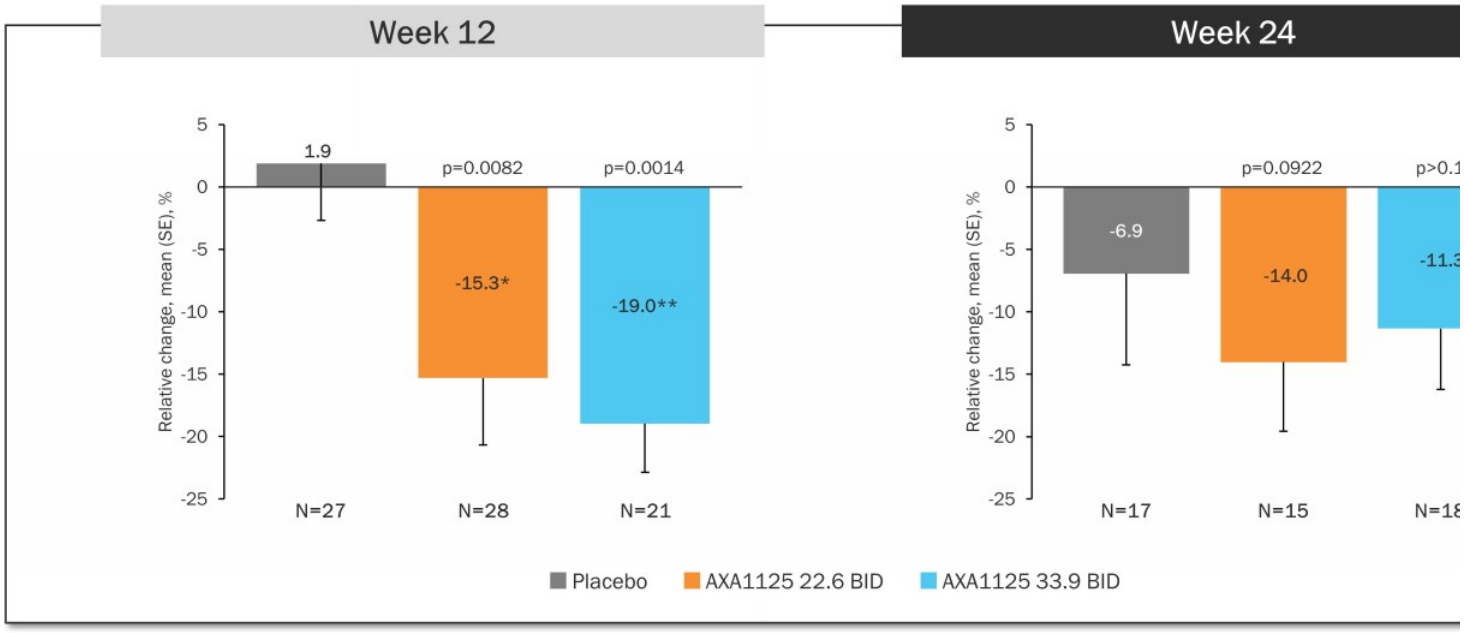
Improvements in ALT (Relative Change)



*p<0.05, **p<0.01, ***p<0.001, versus placebo ; p values derived using mixed models approach. BID=twice daily; LSM=liver stiffness measurement; kPa=kilo pascals; SE=standard error; N=Number of Su

MRI-PDFF – Relative Change from Baseline

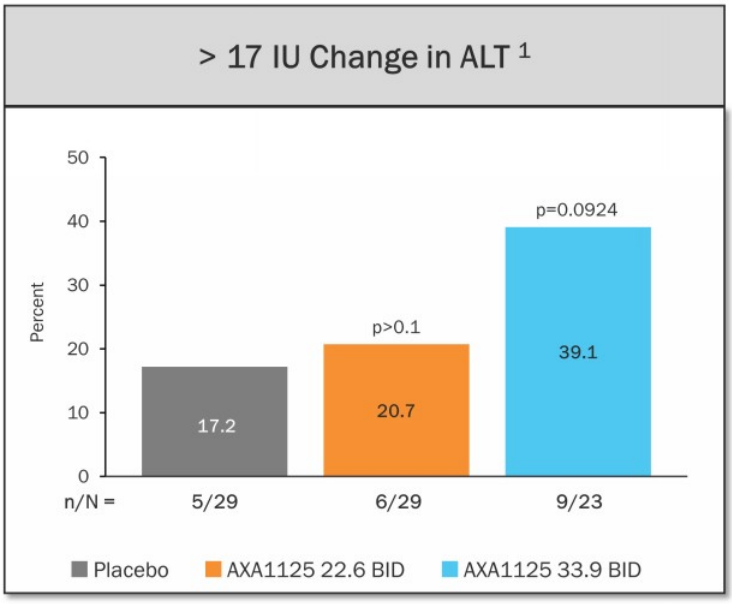
Statistically significant effects at week 12 in relative change from baseline in MRI-PDFF

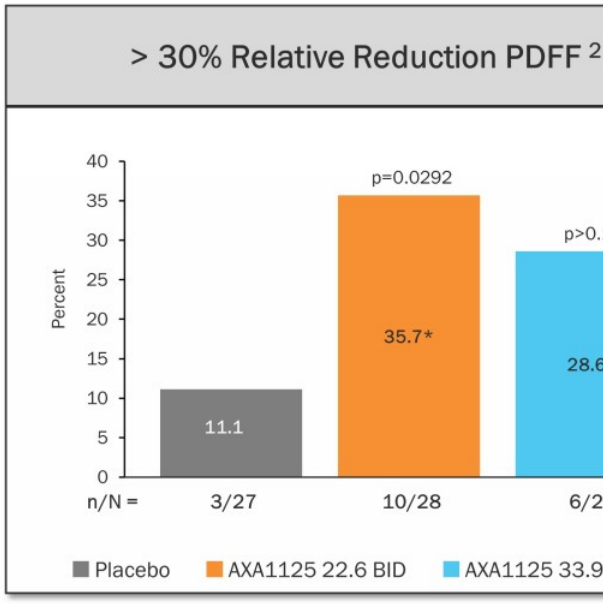


N = the number of subjects of each treatment arm in the specified category at each visit
*p<0.05, **p<0.01, ***p<0.001, versus placebo ; p values derived using mixed models approach. BID=twice daily; MRI-PDFF, magnetic resonance image proton density fat fraction

Proportion Achieving Benchmark Criteria at Week 12

These thresholds have been associated with histologic improvements in NASH clinical trials





n = the number of subjects who met criteria; N= the number of subjects with a post baseline visit
P values using Cochran-Mantel Haenszel test vs placebo *, p< 0.05. 1. Loomba R., et al. *Hepatology* . 2020;72:1219-29. 2. Loomba R., et al. *Gastroenterology* . 2019;156:1219-29

Safety

Safety Interim Analysis

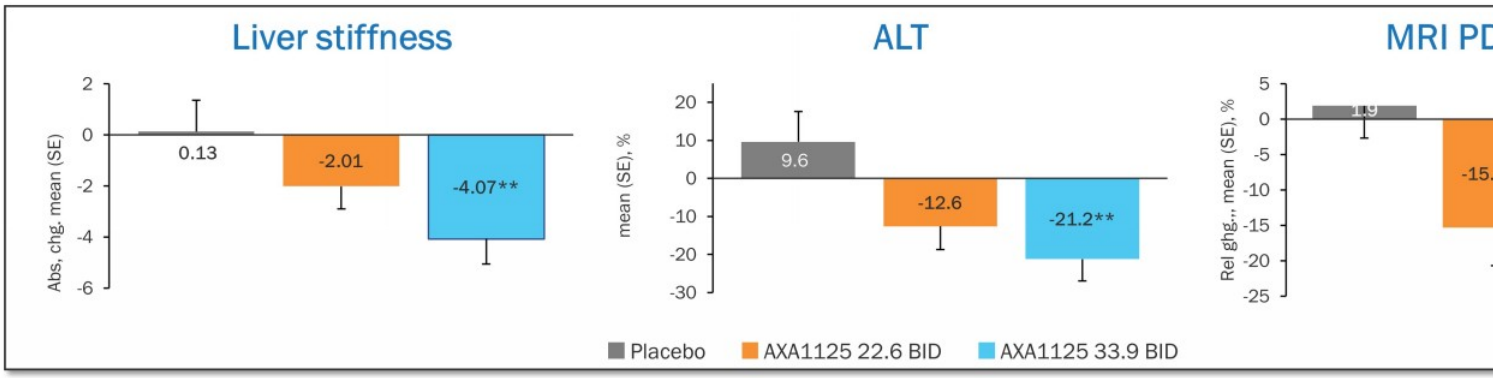
Safety and Tolerability Remains Favorable Based on the Blinded Review

	Placebo N=39 (%)	AXA1125 22.6 g BID N=42 (%)	AXA1125 3 N=42
Subjects with ≥ 1 TEAE	28 (71.8)	28 (66.7)	30 (7
Related TEAE	17 (43.6)	12 (28.6)	18 (4
Maximum Severity, N (% of subjects)			
Grade 1	12 (30.8)	12 (28.6)	11 (2
Grade 2	15 (38.5)	14 (33.3)	15 (3
Grade 3	1 (2.6)	1 (2.4)	4 (9
Grade 4	0	0	0
Grade 5	0	1 (2.4)	0
SAE	1 (2.6%)	1 (2.4%)	4 (4.8
Related SAE	0	0	0

- Most frequent TEAEs are gastrointestinal
- All SAEs and the death unrelated to study product
- No safety or tolerability signals of concern were observed; confirmed by an independent unblinded I

Safety based on what subject received on day 1 of dosing. DMC, independent data monitoring committee; SAE, serious adverse event; TEAEs, treatment emergent adverse events

Summary of Results From this Interim Analysis



- Significant effects on liver stiffness comparable to or better than other agent
- Continued demonstration of effects on relevant pathways of NASH biology
- Observed safety and tolerability pattern consistent with high safety margin
- Both doses are active, and effects consistent in overall population and T2DM
- Results position AXA1125 to be potential first line treatment in NASH

AXA1125 Mechanism of Action

Karim Azer, PhD

VP of Platform and Discovery

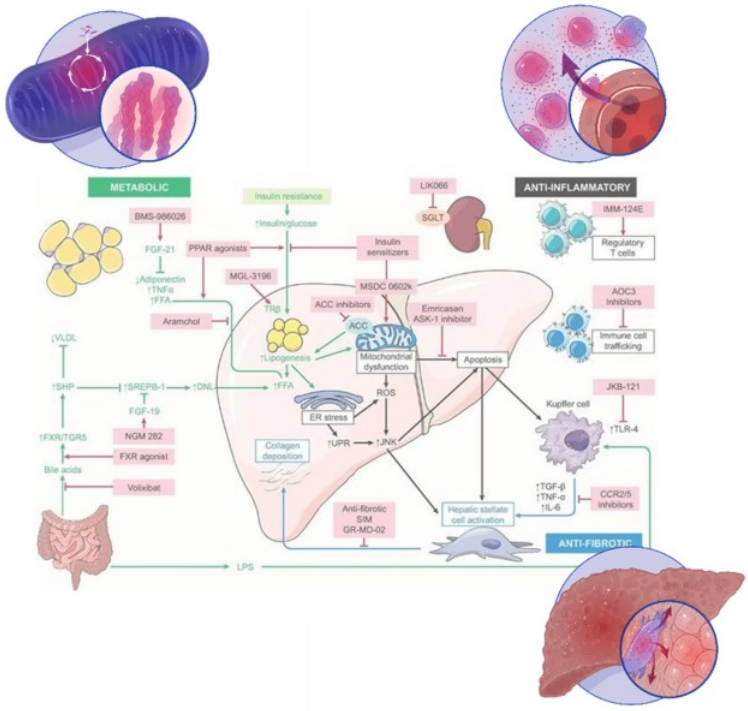
axcella

NASH is a Complex Disease with Pleiotropic Disease Path

AXA1125 is Multi-Targeted by Design Against Key Pathways across NASH Disease Drivers

Metabolism

Single Targets	AXA1125
• GLP-1	↑ AA Metabolism
• SCD1	↑ AMPK
• FGF21	↑ PPARα
• THR-β	↑ Urea cycle
• PPAR	
• FXR	



Inflam

Single Targets

- Cyclophilin
- CCR2/5

Fib

Single Targets

- Galectin
- JNK
- ASK-1

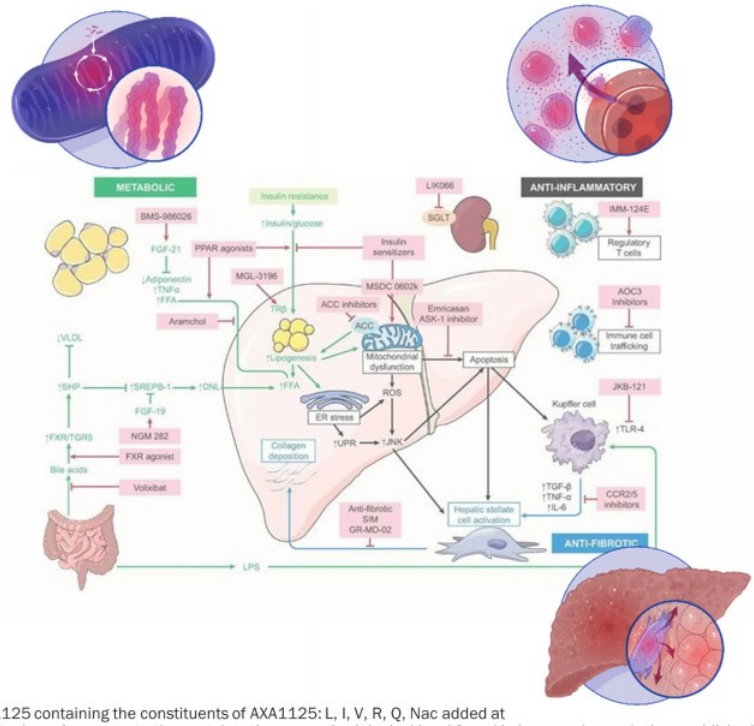
LIVRQNac (AXA1125)

NASH is a Complex Disease with Pleiotropic Disease Path

AXA1125 is Multi-Targeted by Design Against Key Pathways across NASH Disease Drivers

Metabolism

Single Targets	AXA1125
• GLP-1 • SCD1 • FGF21 • THR-β • PPAR • FXR	↑Fatty Acid Oxidation ↓Triglycerides



Inflam

Single Targets

- Cyclophilin
- CCR2/5

Fib

Single Targets

- Galectin
- JNK
- ASK-1

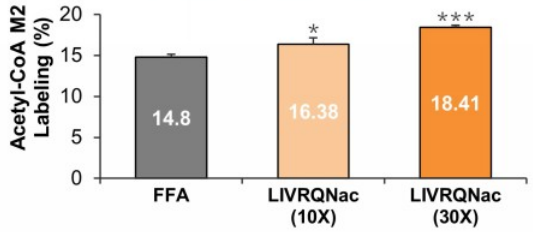
All studies conducted with LIVRQNac, a nonclinical form of AXA1125 containing the constituents of AXA1125: L, I, V, R, Q, Nac added at specified-fold concentrations above plasma (ex: 7.5×, 15×, 30×), where 1× concentration matches the mean physiological level found in human plasma (values published in the Human Metabolome Databas

AXA1125 Improves Key Mitochondrial, Lipid and Energy Pathwa Driving Reduced Liver Fat and Inflammation

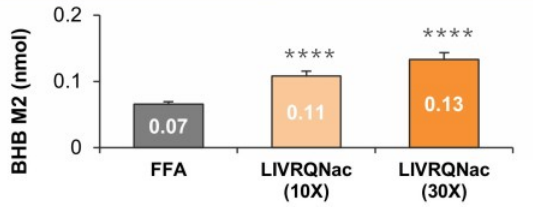
Multi-targeted impact on Metabolism: Beta-Oxidation, Lipid and Bioenergetics

FAO Upregulation & Increased Ketones

↑ Acetyl-CoA M2



↑ BHB M2



*: p<0.05
**: p<0.01
***: p<0.001
****: p<0.0001
(Analysis of variance)

Improved Lipid & Bioenergetic Pathways

	Term	Dir	Score
1	Peroxisomal matrix	21	1.1e-13
2	Electron transfer activity	10	2.4e-13
3	Protein targeting to peroxisome	15	1.4e-11
4	Fatty acid beta-oxidation	15	4.1e-10
5	Tricarboxylic acid cycle	20	4.2e-9
6	Regulation of lipid metabolic process	2.5	1.4e-8
7	Electron transport chain	7.4	4.2e-8
8	Cholesterol biosynthetic process	13	6.1e-8
9	Cholesterol efflux	20	9.3e-8
10	Cholesterol metabolic process	10	1.3e-7

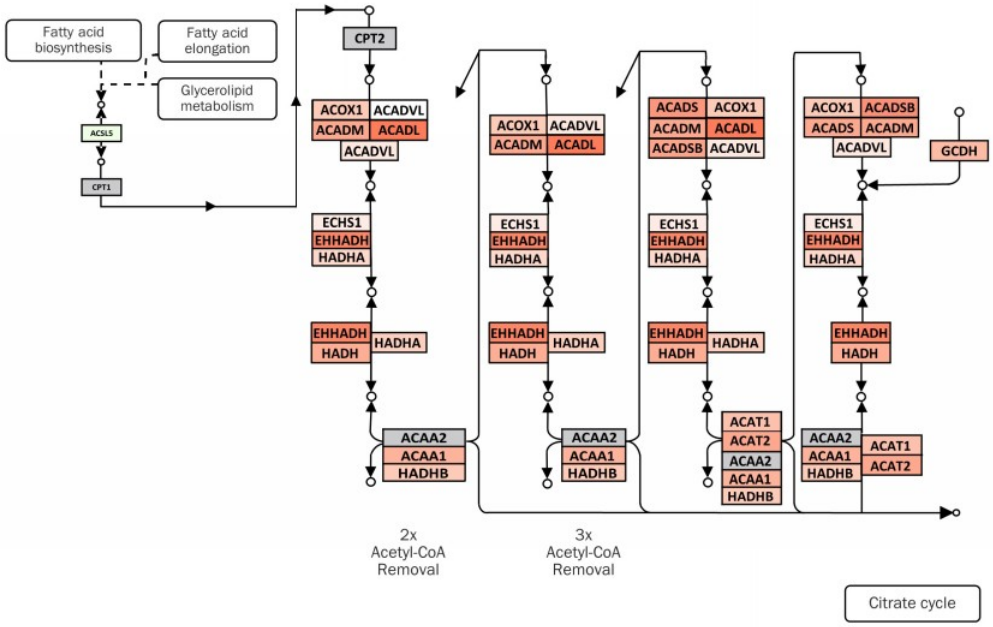
Lipid Metabolism | Energy Metabolism

1. Russell et al. *EASL ILC2022* and *EASL NAFLD Summit*. 2022. Primary Human Hepatocytes were co-treated with 83uM:167uM palmitate:oleate and 1 ng/ml TNF-α to simulate conditions in NASH, and were conditions containing 83uM [U-^{13}C]palmitate label before analysis for tracer study. 167uM:333uM palmitate:oleate and 1 ng/ml TNF-α to simulate conditions in NASH, 30x LIVRQNac 48 hour co-treatment us

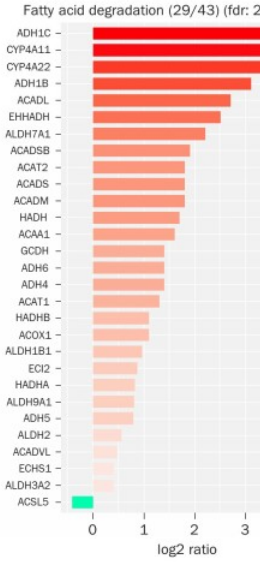
AXA1125 Upregulates Fat Oxidation Genes and Pathway to Incr
Consumption of Fatty Acids and Drive Liver Fat Reduction

AXA1125 Regulates Mitochondrial Metabolism

Beta Oxidation Pathway Upregulated by AXA1125



Beta Oxidation Ge
Upregulated by AXA

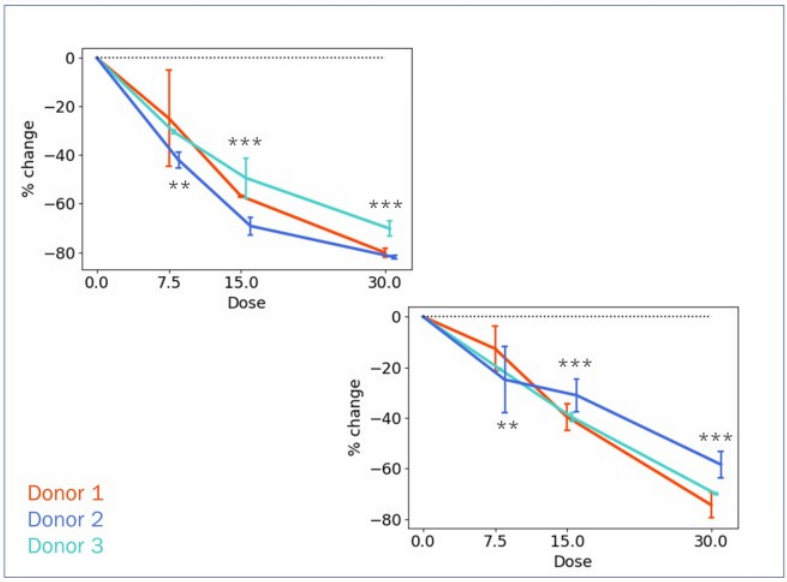


Data derived Primary Human Hepatocyte (PHH) Lipotoxicity Model
Primary Human Hepatocytes were co-treated for 48 hours with 167uM:333uM palmitate:oleate and 1 ng/ml TNF-α to simulate conditions in NASH, 30x LIVRQNac, RNA was collected in triplicate for RNA-Seq

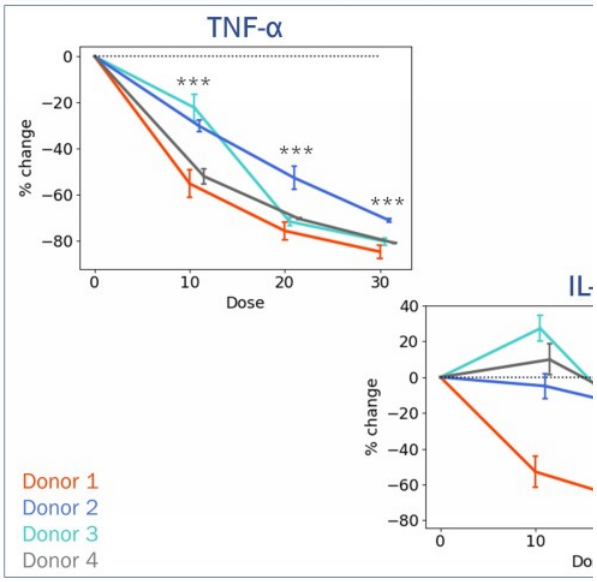
AXA1125 Decreases Hepatocyte Damage and Immune Cell Recruitment and Decreases Proinflammatory Cytokines

Multi-targeted impact on inflammation: Decreased Damage, Recruitment, Cytokines

AXA1125 Decreases Hepatocyte Damage and Promotes Immune Recruitment



AXA1125 Decreases Macrophage Infl Cytokines

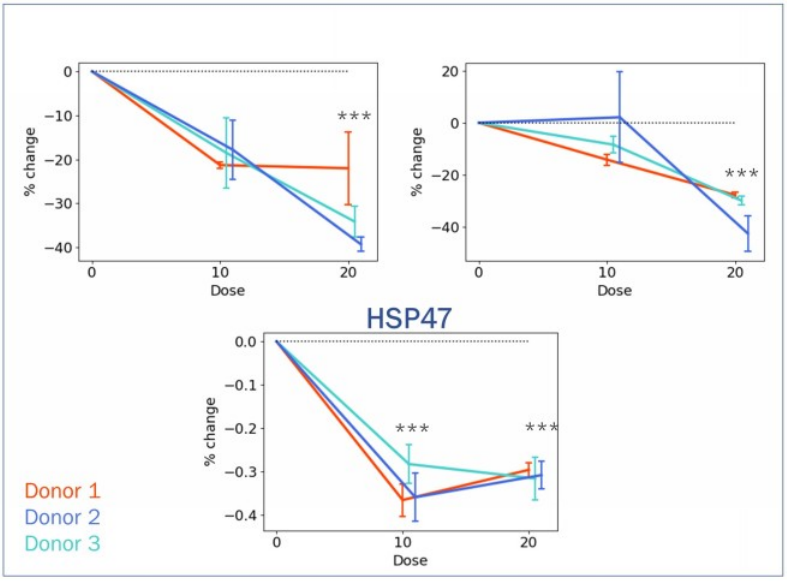


1. Daou et al. *Nat Sci Rep*. 2021. * p < 0.05, ** p < 0.01, *** p < 0.001, Data from Primary Human Hepatocytes (ALT, MCP-1) treated for 48 hours with 167uM:333uM palmitate:oleate and 1 ng/ml TNF-α t data normalized to total protein; Data from Primary Human M1-polarized Macrophages (TNF-α, IL-6) pre-treated with LIVRQNac for 24 hours, then stimulated with 0.15ng/mL LPS for 24 hours, data not norm

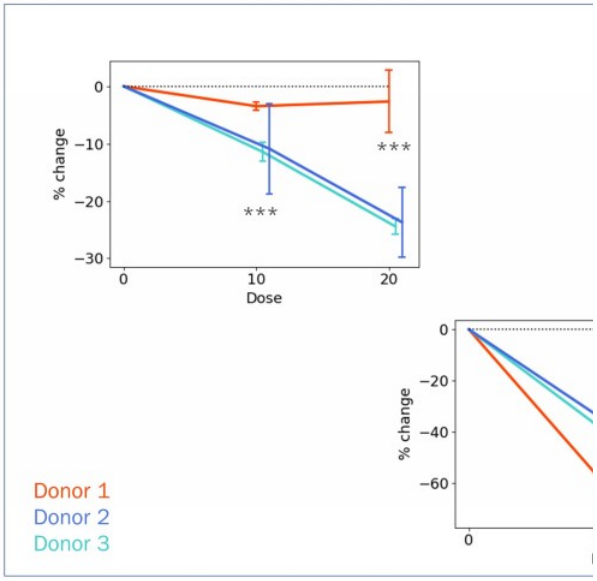
AXA1125 Decreases Fibrosis Activation, Proliferation, and Colla Deposition

Multi-targeted impact on fibrosis improvement: Reduced Activation, Proliferation, Deposition

Decreases in Collagen Deposition Measured with AXA1125



Reduced Fibrogenic Activation & Pro



1. Daou et al. Nat Sci Rep. 2021. ***p < 0.001 versus TGF-β1, Data from Primary Human Hepatic Stellate Cells pre-treated with LIVRQNac for 24 hours, then stimulated with 3.3ng/ml TGF-β1 for 24 hours, E HSP47 expression normalized to GAPDH, other data not nuclei normalized.

Key MOA Takeaways

- NASH is a complex disease with metabolic, inflammatory and fibrotic dysreg
- Combination therapy increases potential to impact multiple targets implicat
- AXA1125 is designed as a multi-targeted agent against key NASH dysregula distinct cellular targets
- Pre-clinical data demonstrates impact of AXA1125 effect on multiple cell ty NASH fibrosis, inflammation and metabolic dysregulation
- Clinical data demonstrate the translation of AXA1125 MOA findings in patie

AXA1125 AND NASH TREATMENT LANDSCAPE

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VISITING PROFESSOR OF HEPATOLOGY

RADCLIFFE DEPARTMENT OF MEDICINE, UNIVERSITY OF OXFORD

MEDICAL DIRECTOR, PINNACLE CLINICAL RESEARCH

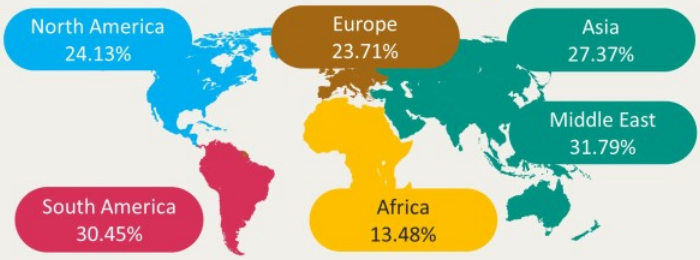
PRESIDENT, SUMMIT CLINICAL RESEARCH

PREVALENCE OF NAFLD AROUND THE WORLD

…is increasing in line with **obesity, type 2 diabetes** and **age**

…is about **25%** in the general population

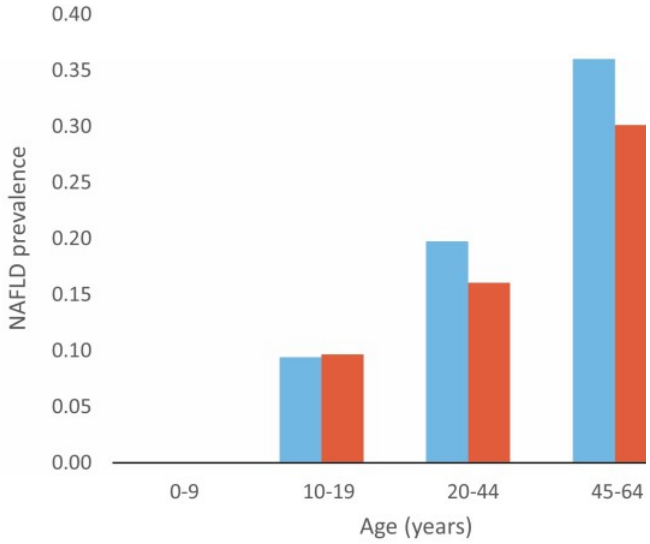
…varies across the **globe**



…varies across **ethnicities**
(Hispanics > non-Hispanic white > African Americans)

is higher in **urban** than rural population

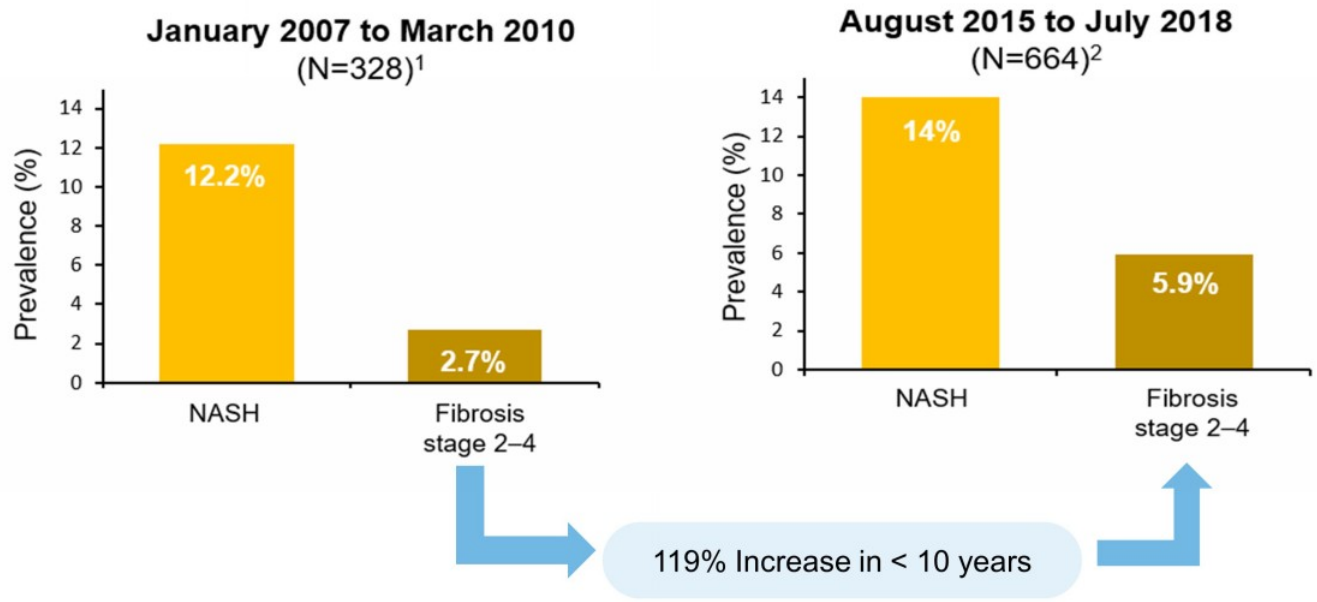
NAFLD prevalence by age and sex (US, Southwest China and Spain)



Younossi Z, et al. *Hepatology*. 2019;69(6):2672-2682; Younossi ZM et al. J *Hepatol.* 2019;70(3):531-544.

PREVALENCE OF NASH AMONG US MIDDLE-AGED COHORTS

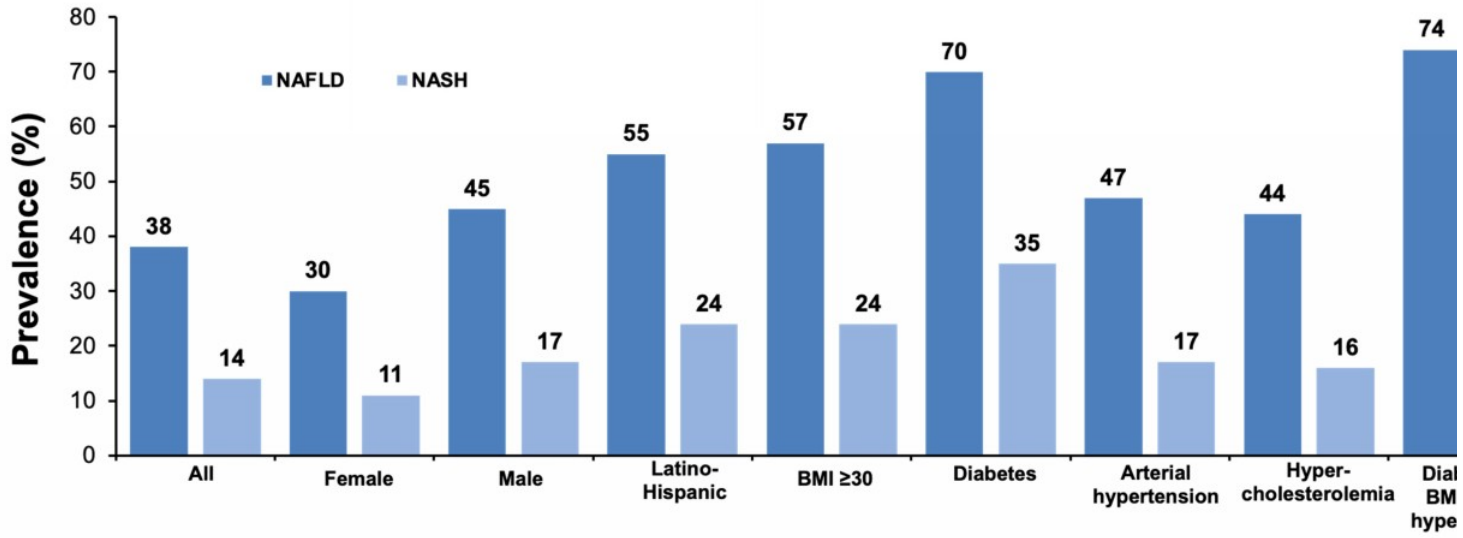
2 prospective NASH prevalence studies



NASH, non-alcoholic steatohepatitis.

1. Williams CD, et al. *Gastroenterology*. 2011;140:124–31; 2. Harrison SA, et al. *J Hepatol*. 2021;S0168-8278:00176-8.

NAFLD AND NASH PREVALENCE IN DIFFERENT GROUPS (US MIDDLE-AGED COHORT, N=664)

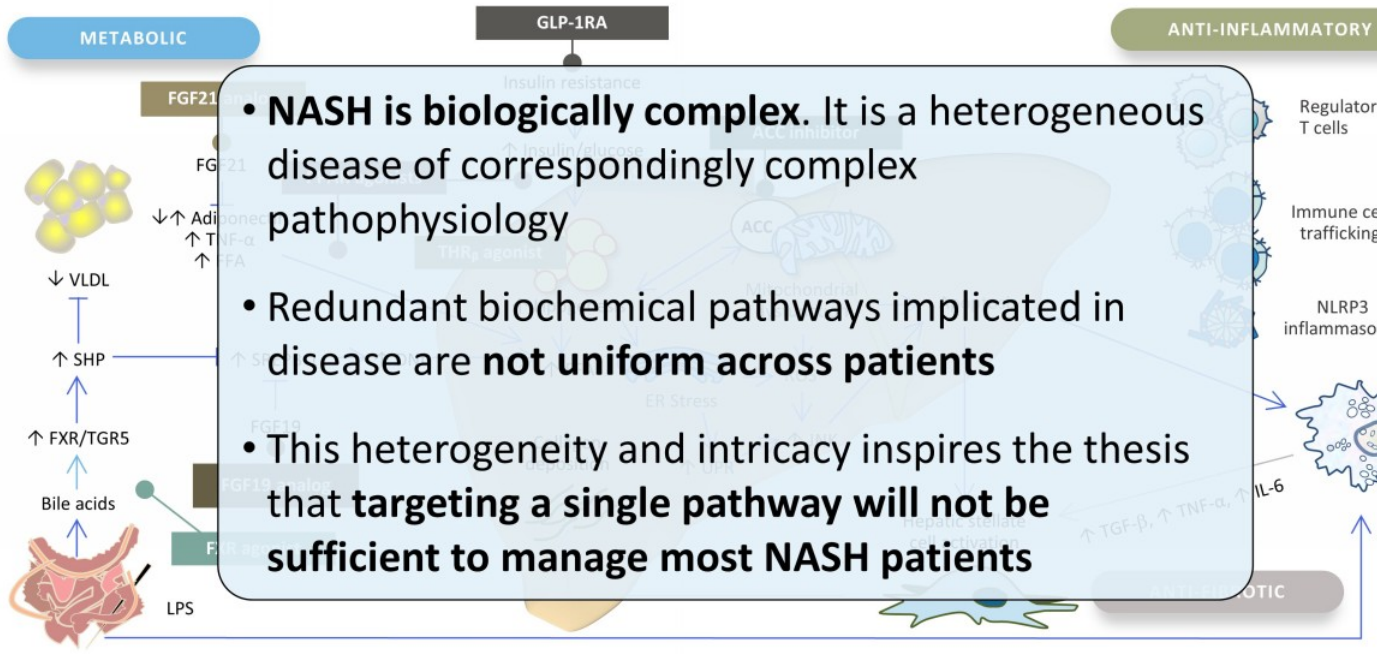


BMI measured in kg/m2

BMI, body mass index; NAFLD; non-alcoholic fatty liver disease; NASH, non-alcoholic steatohepatitis.

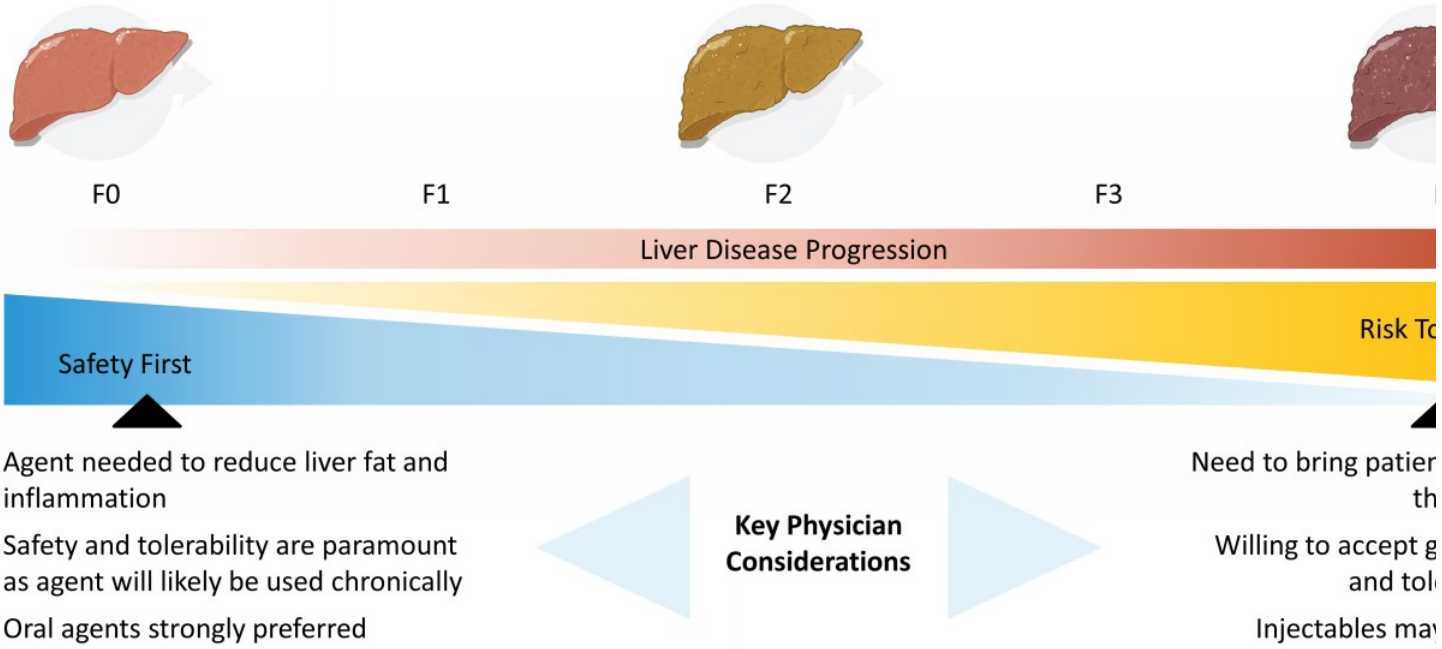
Harrison SA et al. *J Hepatol*. 2021;S0168-8278:00176-8.

NASH: POTENTIAL THERAPEUTIC TARGETS



See slides notes for abbreviations.
Adapted from: Konerman MA, et al. *J Hepatol*. 2018;68:362–375.

THE RISK/BENEFIT EQUATION CHANGES AS NASH PROGRESS



MULTIPLE OPTIONS TO ADDRESS A HETEROGENEOUS POPULATION

	Key Mechanisms	Candidates in Ph2/3 Development
Multi-Targeted	• EMMs • Combinations	• AXA1125 • Sema + cilo + firsocostat • Tropifexor + cenicriviroc
Anti-Fibrotic	• FXR • PPAR • Galectin protein inhibitors	• Belapectin • Lanifibranor • Tropifexor • Obeticholic acid
Anti-Hyperglycemics	• SCD-1 • THR-Beta • ACC Inhibitors • DGAT Inhibitors	• Aldafermin • Semaglutide • MK3655
Anti-Hyperlipidemics	• GLP-1 • MPC modulators • FGF • Insulin Receptors	• Aramchol • Resmetirom • VK2809
Anti-Inflammatory	• Toll-like receptors • AA3R agonist	• Secukinumab • JBK-122
Other	• AMPK • GHRF	• PXL770

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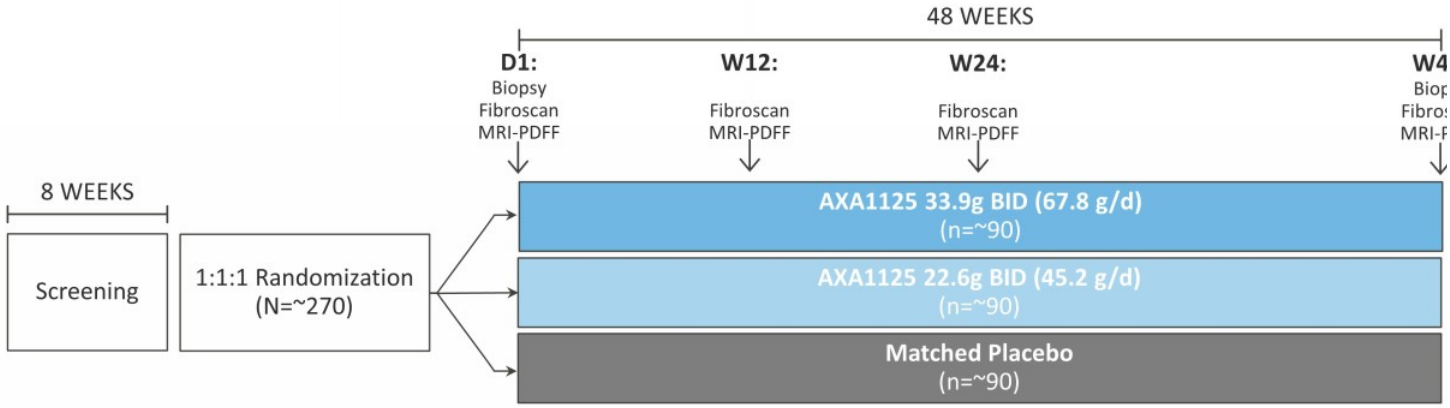
PHASE 2B CLINICAL TRIAL UNDERWAY

PREPLANNED INTERIM ANALYSIS WHEN 30 SUBJECTS/ARM REACHED WEEK 12



Core elements	Description
Design	• Randomized, double-blind, placebo-controlled, dose-ranging study over 48 weeks
Study population	• Biopsy-proven F2/F3 NASH with NAS≥4 • Stratification by type 2 diabetes status
Preplanned IA on secondary endpoints	• Improvement in non-invasive markers, including MRI-PDFF, ALT and Fibroscan

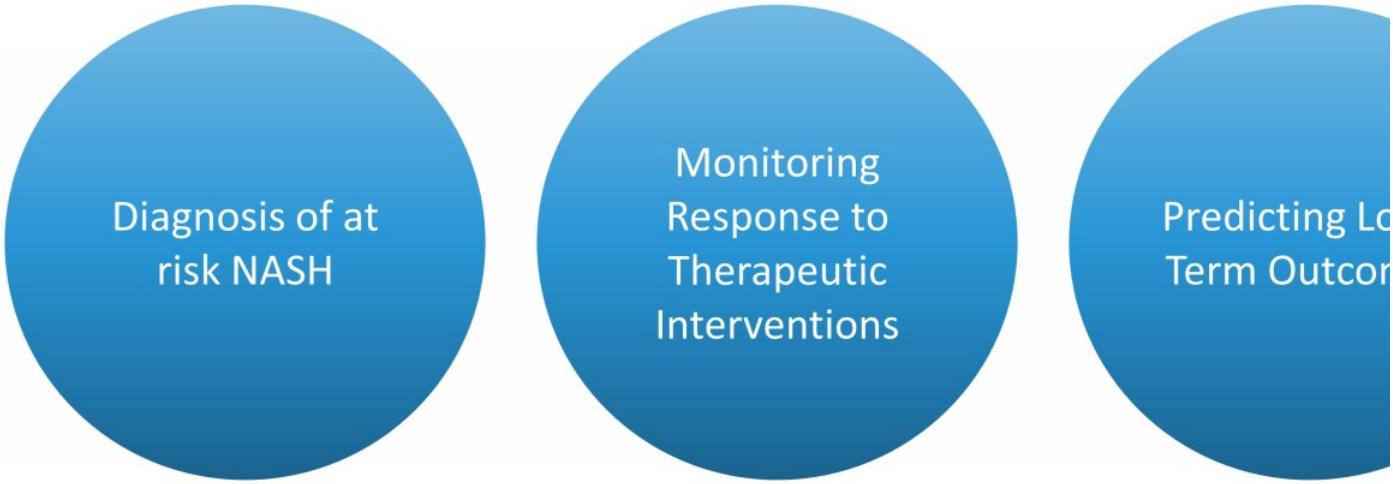
PATIENT DEMOGRAPHICS AND BASELINE METRICS

Baseline Demographic/Metric	Placebo (N=39)	AXA1125 22.6 BID (N=42)	AXA11
Mean age in years (SD)	57.8 (9.8)	55.8 (13.5)	56
Sex			
Male (%)	12 (30.8)	10 (23.8)	1
Female (%)	27		
Mean Body Mass Index (kg/m^2) / (SD)	37.8		
With Type 2 Diabetes (%)	22		
Metabolism			
Mean Liver Fat Content by MRI-PDFF (SD)	18.99		
Mean HOMA-IR	13.56		
HbA1c (SD)	6.7		
Inflammation			
Mean ALT (U/L) (SD)	58.6 (34.3)	51.5 (24.2)	54
Fibrosis			
Mean Fibroscan score (kPa) (SD)	13.29 (6.72)	11.40 (3.47)	14
Mean Fib-4 (SD)	1.48 (0.65)	1.24 (0.58)	1.
Mean ELF (SD)	9.966 (0.716)	9.636 (0.843)	10.0

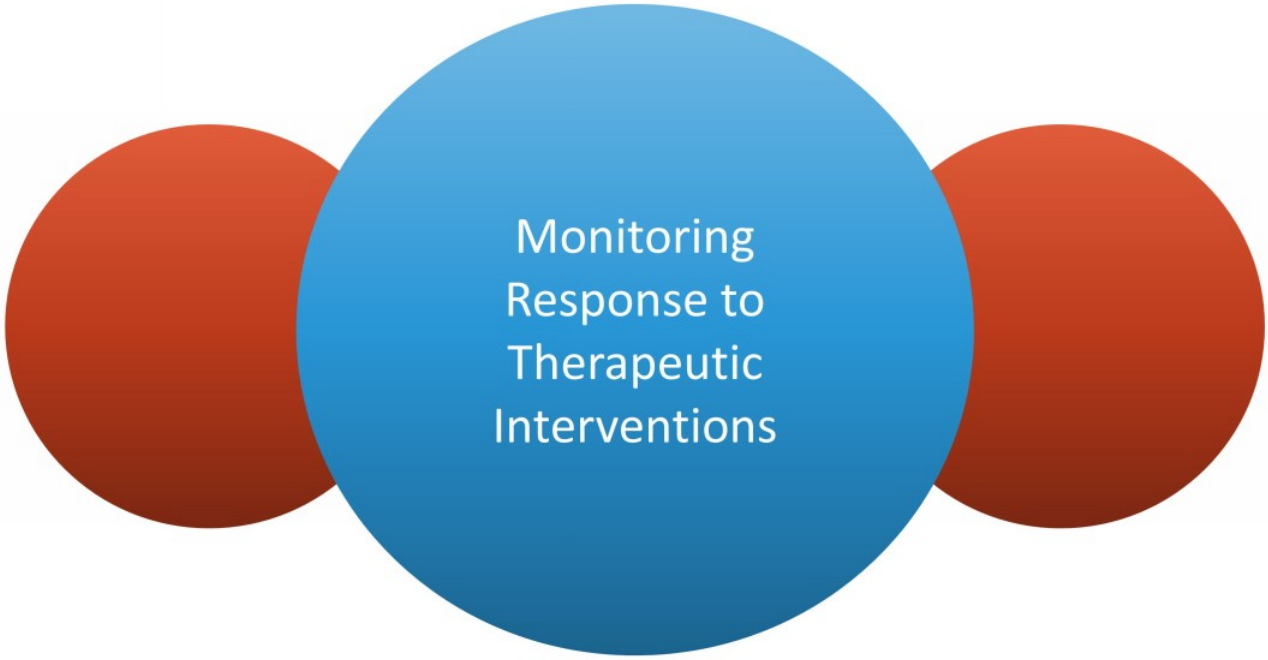
This study population is reflective of a very active disease state with significant fibrosis

EFFECTS ON NON-INVASIVE MEASURES

DIFFERENT CONTEXT OF USE FOR NITs

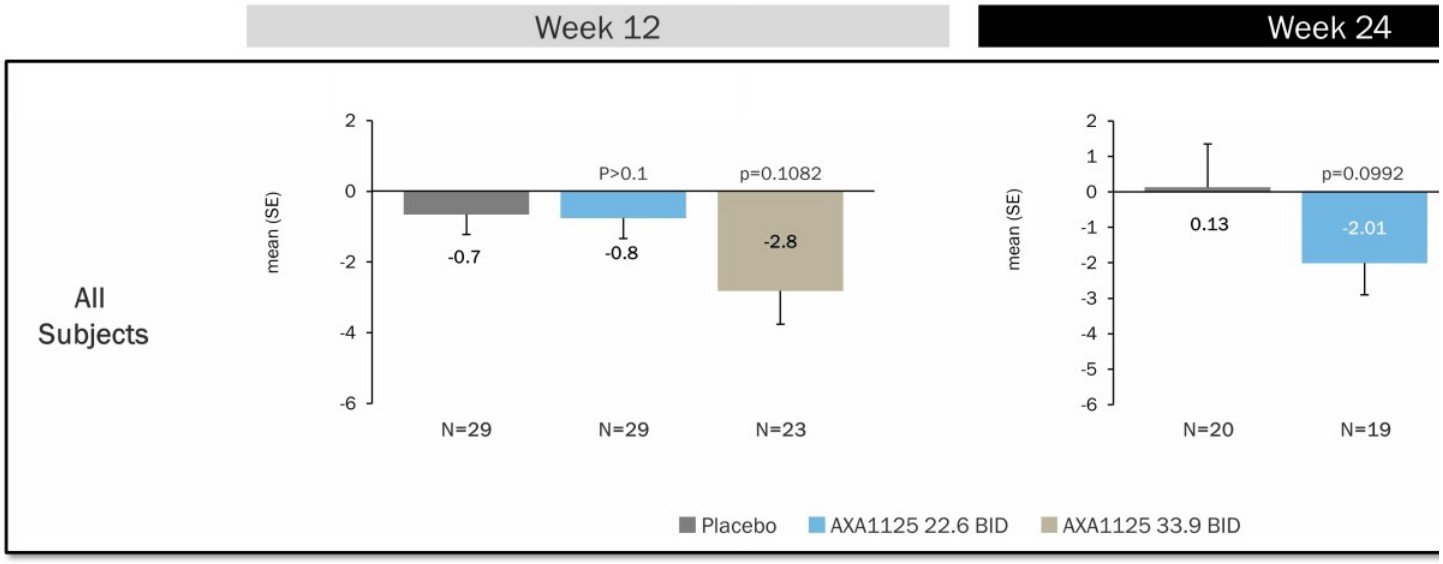


DIFFERENT CONTEXT OF USE FOR NITs



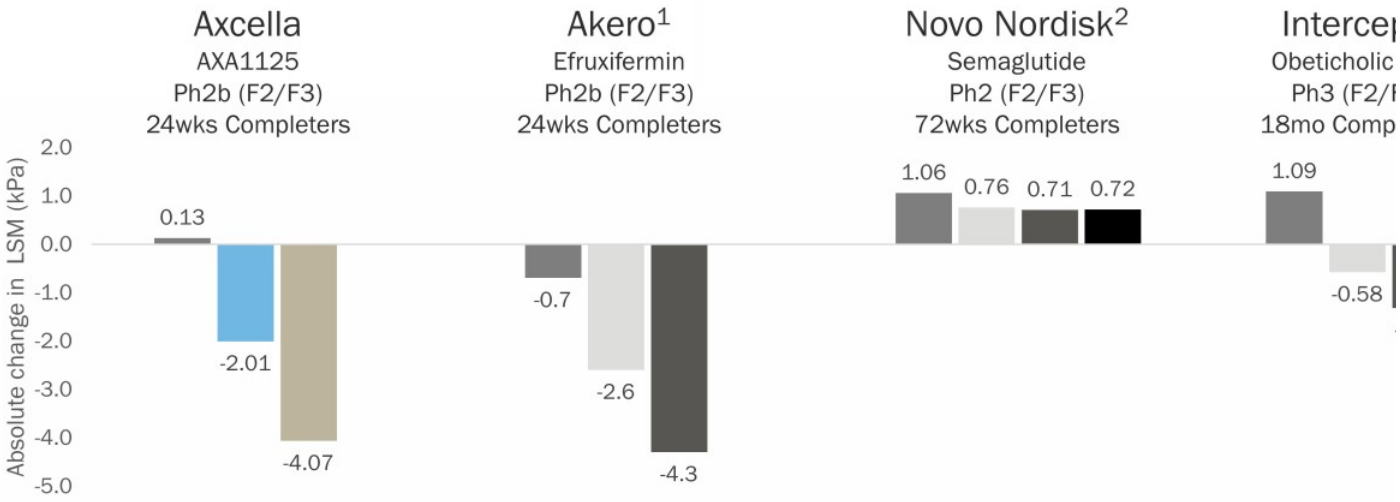
SIGNIFICANT IMPROVEMENTS IN LIVER STIFFNESS

CONSISTENT WITH PRIOR DATA ON FIBROSIS MARKERS AT WEEK 16



*p<0.05, **p<0.01, ***p<0.001, versus placebo; P values derived using mixed models approach. LSM, liver stiffness measurement; kPa, kilo pascals; SE, standard error

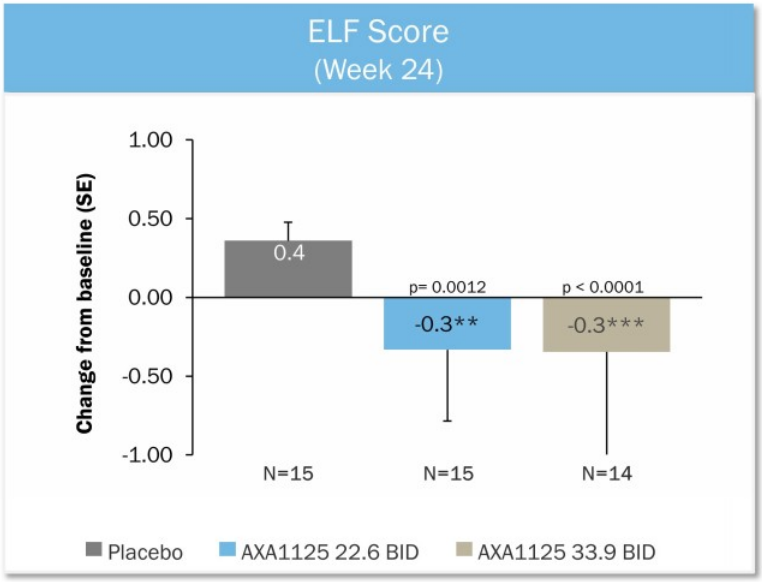
AXA1125 EFFECTS ON LIVER STIFFNESS IN COMPARABLE TO OTHER BEST IN CLASS AGENTS IN LATE DEVELOPMENT

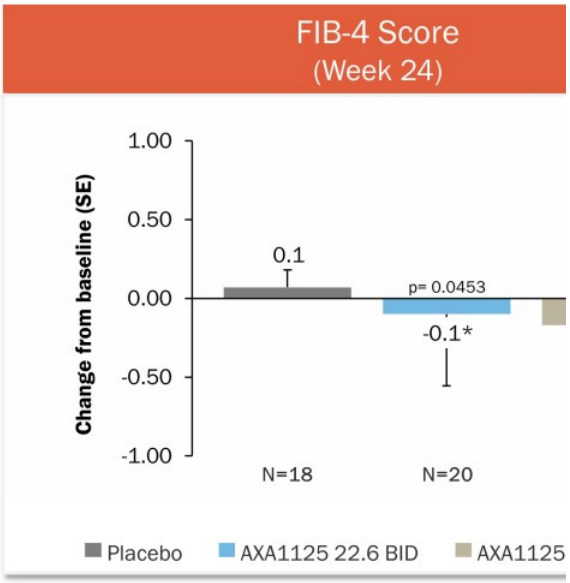


[1]Yale,C. (September 13, 2022). *Phase 2b HARMONY Study Results* [PowerPoint presentation]. Akero Phase 2B HARMONY Trial Data Presentation. https://ir.akerotx.com/static-files/b3cbfed1-3eee-49cf-8a10-cc
[2]Semaglutide-Newsome et al.(2020) New EnglJ Med
[3]Loomba, R et al. Obeticholic Acid Demonstrates Sustained Improvements at Month 24 in Transaminases and Non-Invasive Markers of Fibrosis: Results of a Post Hoc Analysis From the Interim Analysis of the RE
Poster presented at: European Association for the Study of the Liver; 27-29 August 2020; Virtual.
OLE = Open Label Extension

BLOOD BIOMARKERS PROVIDE FURTHER EVIDENCE OF EFFECT ON FIBROSIS

STATISTICALLY SIGNIFICANT CHANGES SEEN AS EARLY AS WEEK 12





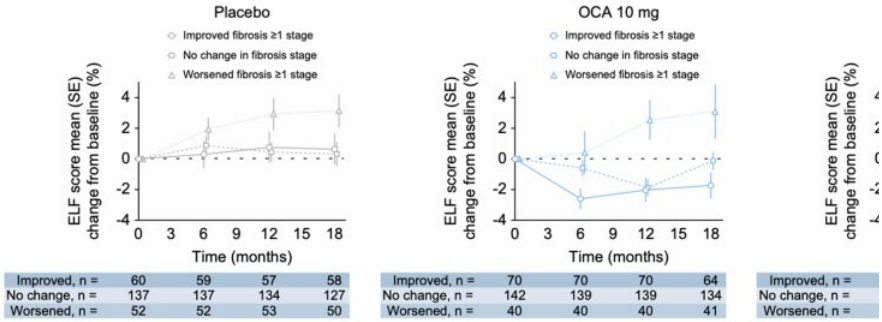
*p<0.05, **p<0.01, ***p<0.001, versus placebo; p values derived using mixed models approach. SE, standard error

ELF

Monitoring Response to Therapeutic Interventions

EVIDENCE FROM REGENERATE TRIAL 18-MONTH INTERIM ANALYSIS – OBETICHOLIC ACID

N=931



Improved, n =	60	59	57	58
No change, n =	137	137	134	127
Worsened, n =	52	52	53	50

Improved, n =	70	70	70	64
No change, n =	142	139	139	134
Worsened, n =	40	40	40	41

- Patients with ≥1-stage fibrosis improvement had the greatest improvement
  patients with ≥1-stage fibrosis worsening typically showed no NIT improvem
- AUROC values for each of these were suggestive of only weak association
- NIT improvements observed in REGENERATE are associated with fibrosis imp
  Month 18, individual NIT changes are not likely to be effective univariate cli
  fibrosis improvement by Month 18.

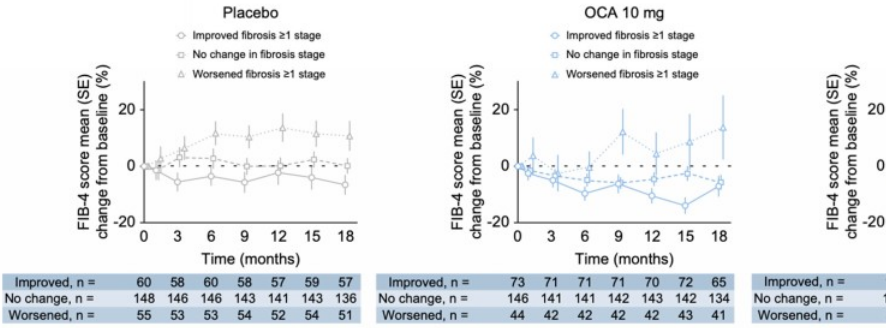
Rinella ME. Non-invasive evaluation of response to obeticholic acid in patients with NASH: Results from the REGENERATE study. J Hepatol. 2022 Mar;76(3):536-548

FIB-4

Monitoring Response to Therapeutic Interventions

EVIDENCE FROM REGENERATE TRIAL 18-MONTH INTERIM ANALYSIS – OBETICHOLIC ACID

N=931



Improved, n =	60	58	60	58	57	59	57
No change, n =	148	146	146	143	141	143	136
Worsened, n =	55	53	53	54	52	54	51

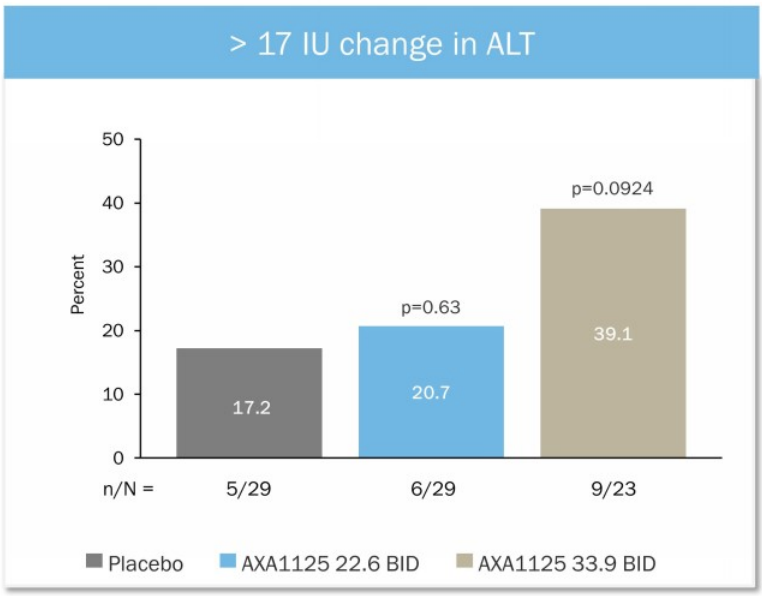
Improved, n =	73	71	71	71	70	72	65
No change, n =	146	141	141	142	143	142	134
Worsened, n =	44	42	42	42	42	43	41

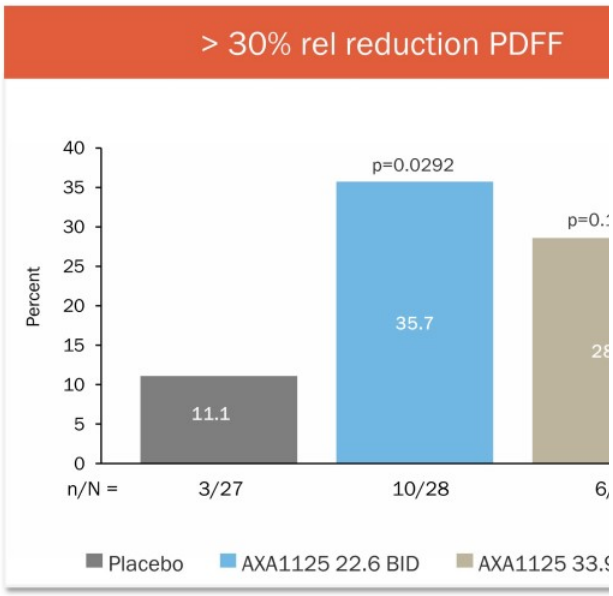
Improved, n =	
No change, n =	
Worsened, n =	

- Patients with ≥1-stage fibrosis improvement had the greatest improve
  while patients with ≥1-stage fibrosis worsening typically showed no NI
- AUROC values for each of these were suggestive of only weak assoc
- NIT improvements observed in REGENERATE are associated with fib
  improvement at Month 18, individual NIT changes are not likely to be
  univariate clinical predictors of fibrosis improvement by Month 18.

Rinella ME. Non-invasive evaluation of response to obeticholic acid in patients with NASH: Results from the REGENERATE study. J Hepatol. 2022 Mar;76(3):536-548

PROPORTION ACHIEVING BENCHMARK CRITERIA AT WEEK 12





n = the number of subjects who met criteria; N= the number of subjects with a post baseline visit; P values using Cochran-Mantel Haenszel test vs placebo

AXA1125 DEMONSTRATED SIMILAR RESULTS IN A PRIOR NAS CLINICAL STUDY

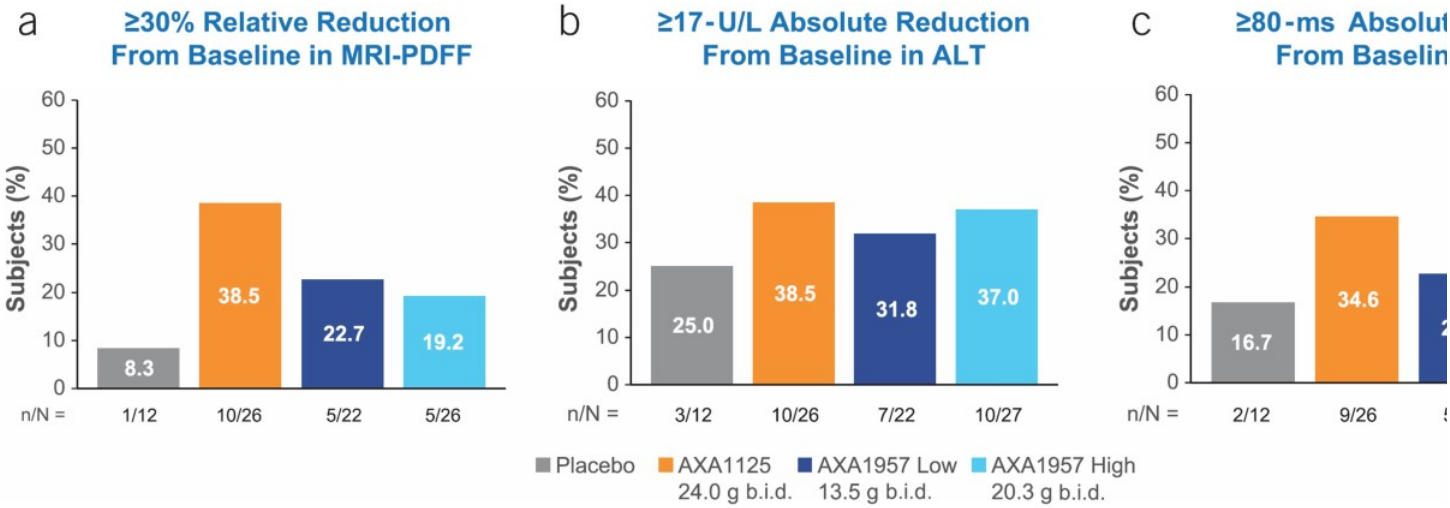


Figure 5. Proportion of subjects with clinically relevant thresholds of biologic activity (**a**, **b**, and **c**) in the overall safety population. ALT transferase; cT1, corrected T1; MRI-PDFF, MRI-proton density fat fraction.

Harrison SA, Baum SJ, Gunn NT, Younes ZH, Kohli A, Patil R, Koziel MJ, Chera H, Zhao J, Chakravarthy MV. Safety, Tolerability, and Biologic Activity of AXA1125 and AXA1957 in Subjects With Nonalcoholic Fatty 2021 Dec 1;116(12):2399-2409. doi: 10.14309/ajg.0000000000001375. PMID: 34382947; PMCID: PMC8631161.

ALT

Monitoring Response to Therapeutic Interventions

EVIDENCE FROM FLINT 72-WEEK TRIAL OBETICHOLIC ACID

N=283

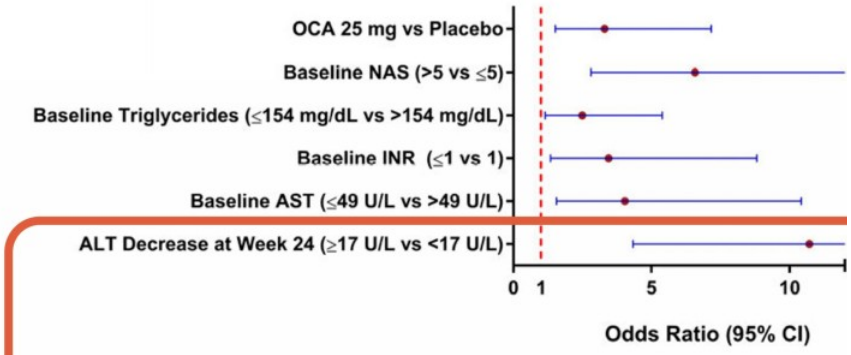


Figure 1. Forest Plot of Predictors of Histologic Response.

Plot shows the odds ratio and 95% CI for each of the selected predictors of response
odds ratio is >1, the predictor is associated with higher odds of histological response
Significance of each of the selected predictors was assessed using a Wald Chi-Squar

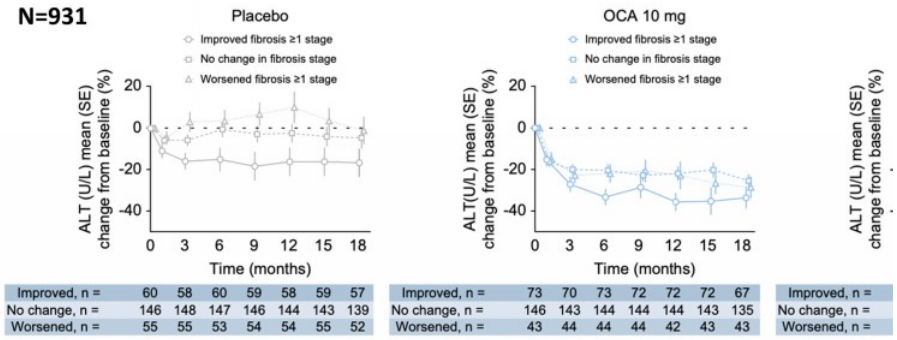
17 IU/L ALT decline was significantly associate with histologic markers of response

Loomba, Rohit et al. "Factors Associated With Histologic Response in Adult Patients With Nonalcoholic Steatohepatitis." *Gastroenterology*vol. 156,1 (2019): 88-95.e5.

ALT

Monitoring Response to Therapeutic Interventions

EVIDENCE FROM REGENERATE TRIAL 18-MONTH INTERIM ANALYSIS – OBETICHOLIC ACID



Improved, n =	60	58	60	59	58	59	57
No change, n =	146	148	147	146	144	143	139
Worsened, n =	55	55	53	54	54	55	52

Improved, n =	73	70	73	72	72	72	67
No change, n =	146	143	144	144	144	143	135
Worsened, n =	43	44	44	44	42	43	43

- Patients with ≥1-stage fibrosis improvement had the greatest improvement i
  patients with ≥1-stage fibrosis worsening typically showed no NIT improveme
- AUROC values for each of these were suggestive of only weak association
- NIT improvements observed in REGENERATE are associated with fibrosis imp
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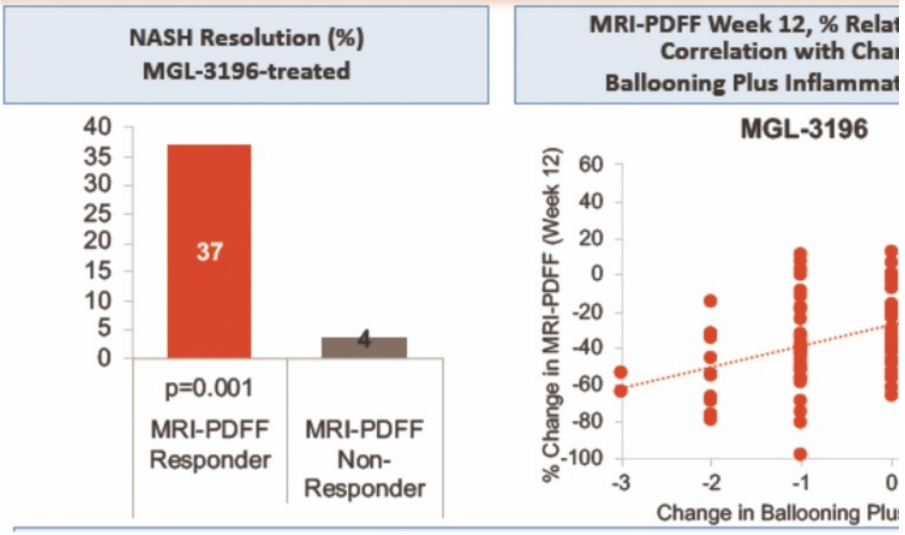
  improvement by Month 18.

Rinella ME. Non-invasive evaluation of response to obeticholic acid in patients with NASH: Results from the REGENERATE study. J Hepatol. 2022 Mar;76(3):536-548

MRI-PDFF

Monitoring Response to Therapeutic Interventions

EVIDENCE FROM RESMETIROM 36-WEEK PH2 TRIAL



MRI Responders: ≥ 30% relative decline in LFC

Harrison SA In a placebo-controlled 36-week phase 2 trial, treatment with MGL-3196 compared to placebo results in significant reduc- tions in hepatic fat (MRI-PDFF), liver enzymes, fibrosis biomarkers, atherogenic lipids, and improvement in NASH on serial liver biopsy. Hepatology 2018;68:9A-10A.

MRI-PDFF

Monitoring Response to Therapeutic Interventions

≥30% RELATIVE DECLINE IN MRI-PDFF

Change in MRI-PDFF and Histologic Response in Patients with NASH
Review and Meta-Analysis – 7 studies / 346 patients

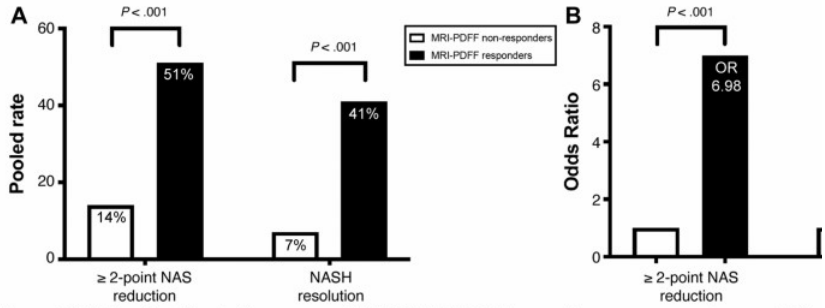


Figure 3. (*A*) The rate of 2-point improvement in NAS in MRI-PDFF responders vs nonresponders was 51% and the rate of NASH resolution in MRI-PDFF responders vs nonresponders was 41% vs 7% ($P < .001$ 2-point improvement in NAS in MRI-PDFF responders vs nonresponders was 6.98 (95% CI, 2.38–20.43; odds of NASH resolution in MRI-PDFF responders vs nonresponders was 5.45 (95% CI, 1.53–19.46; $P <$

"These results support the use of MRI- PDFF in non-invasive monitori response in early-phase NASH clinical trials"

Stine JG, Munaganuru. Change in MRI-PDFF and Histologic Response in Patients With Nonalcoholic Steatohepatitis: A Systematic Review and Meta-Analysis. Clin Gastroenterol Hepatol. 2021 Nov.

SAFETY

SAFETY INTERIM ANALYSIS

SAFETY AND TOLERABILITY REMAINS FAVORABLE BASED ON THE BLINDED REVIEW

	Placebo N=39 (%)	AXA1125 22.6 BID N=42 (%)	AXA11 N=
Subjects with ≥ 1 TEAE	28 (71.8)	28 (66.7)	3
Related TEAE	17 (43.6)	12 (28.6)	1
Maximum Severity, n (% of subjects)			
Grade 1	12 (30.8)	12 (28.6)	1
Grade 2	15 (38.5)	14 (33.3)	1
Grade 3	1 (2.6)	1 (2.4)	
Grade 4	0	0	
Grade 5	0	1 (2.4)	
SAE	1 (2.6%)	1 (2.4%)	4
Related SAE	0	0	

- Most frequent TEAEs are gastrointestinal
- All SAEs and the death unrelated to study product
- No safety or tolerability signals of concern were observed; confirmed by an independent unblinded I

Safety based on what subject received on day 1 of dosing. DMC, independent data monitoring committee; SAE, serious adverse event; TEAEs, treatment emergent adverse events

SUMMARY

The current study is enrolling patients with significant NASH and fibrosis

AXA1125 appears safe and well tolerated

Oral formulation is key benefit

Non-invasive tests obtained at a relatively short time period in a subset of patients enrolled suggest a p
impact on disease activity and potentially fibrosis

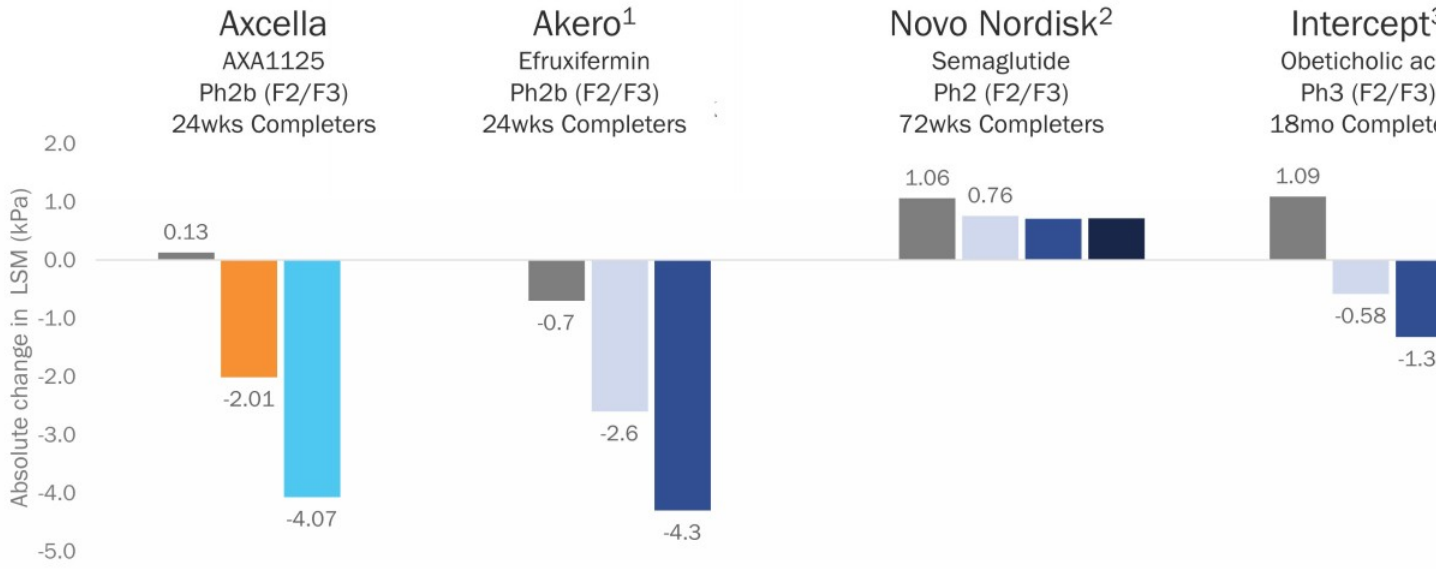
Potential for use as a monotherapy or as part of a combination therapy

Closing Remarks

Bill Hinshaw

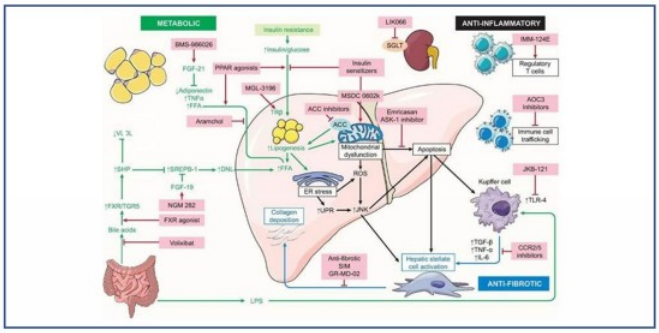
Chief Executive Officer

AXA1125 effects on liver stiffness are comparable to other bes agents in late development



[1]Yale,C. (September 13, 2022). *Phase 2b HARMONY Study Results* [PowerPoint presentation]. Akero Phase 2B HARMONY Trial Data Presentation. https://ir.akerotx.com/static-files/b3cbfed1-3eee-49cf-8a
[3]Semaglutide-Newsome et al.(2020) New EnglJ Med
[4]Loomba, R et al. Obeticholic Acid Demonstrates Sustained Improvements at Month 24 in Transaminases and Non-Invasive Markers of Fibrosis: Results of a Post Hoc Analysis From the Interim Analysis of th
presented at: European Association for the Study of the Liver; 27-29 August 2020; Virtual.

Conclusion



- NASH is a large complex disease with a hig need and will require multiple strategies a
- AXA1125 demonstrated best in field fibrot at 24 weeks
- AXA1125 continues to demonstrate its dir targeted effects across metabolism, inflam fibrosis with both doses and in both popul
- Potential for differentiation in key populati
  - T2D, Adolescents, Combinations
- Well positioned for 1st line with attractive p
  - Multi-targeted activity, favorable tolerability an dosing

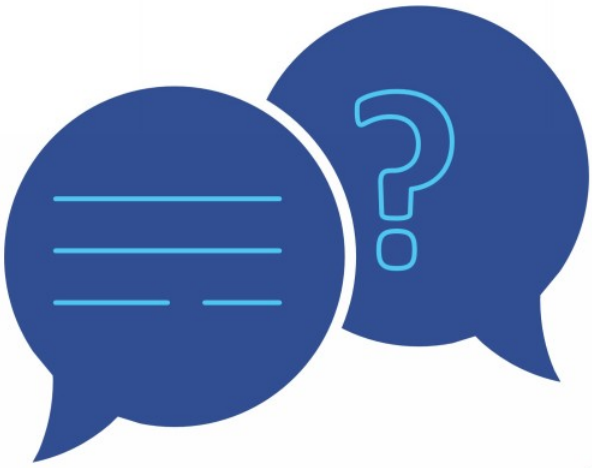
[1]Global Liver Institute U.S. NASH Action Plan (Dec. 2020)
Image sourced from: https://www.today.com/health/nonalcoholic-fatty-liver-disease-are-you-risk-t121855

Milestone Rich Time

Program	Update	Timing
AXA1125 for NASH	Phase 2b Interim Data	Q3 202
	First Adolescent Subject Enrolled	Q4 202
	Scientific Communication	2H 202
	NASH Top-Line Data	1H 202
AXA1125 for Long COVID	Phase 2a Enrollment Completion	Q2 202
	Phase 2a Top-Line Data	Q3 202
	Regulatory Engagement	2H 202
	Scientific Communication	2H 202
	Next Trial Initiation	1H 202

Milestone timing based on current expectations and subject to change.

Q&A



Dr. Stephen Harrison
Medical Director for Pinnacle Clinical Research
President of Summit Clinical Research

Bill Hinshaw
President & Chief Executive Officer
Axcella

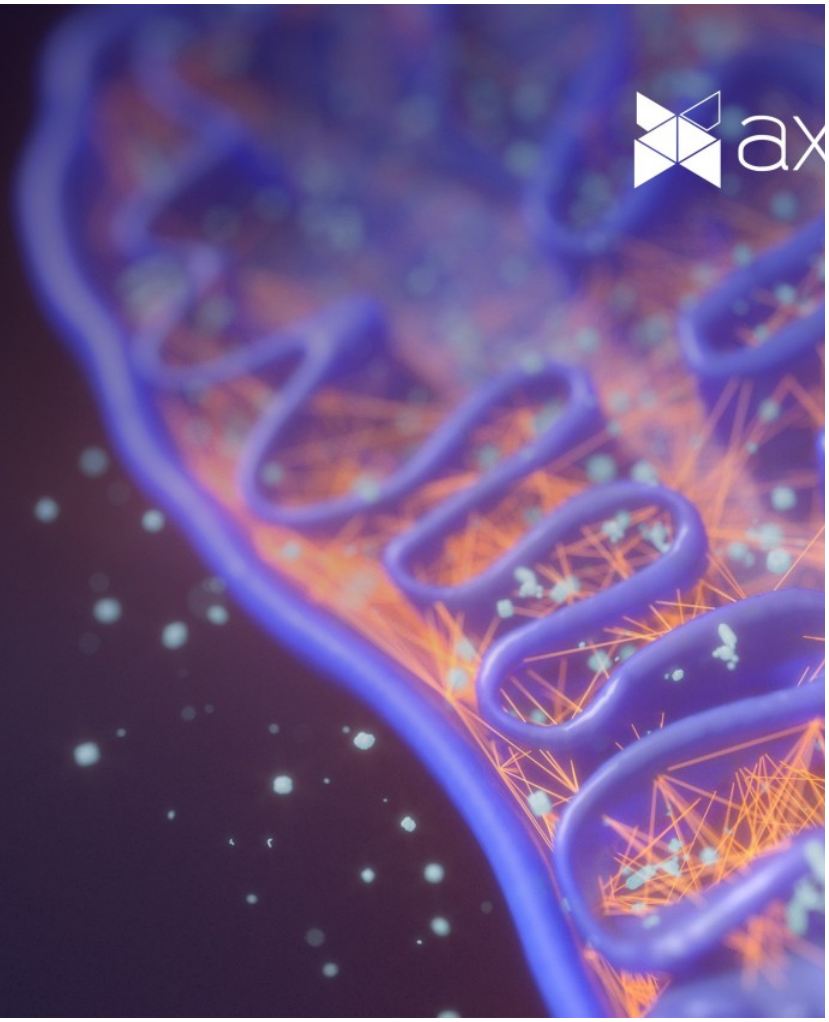
Dr. Margaret K
Chief Medical Officer

Dr. Karim Azer
Head of Platform and Discovery,
Axcella

Bob Crane
Chief Financial Officer, Axcella

NASDAQ: AXLA

Thank You



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