



# Asclepis Pharma(HK.1672)

2024 Interim Results Highlights

August 30<sup>th</sup> 2024



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## Overview of 2024 H1 Results

## Significant Progress Been Made from MASH and Acne Pipeline in 2024 H1

### ASC41 MASH

- ✓ PhII Interim results: At Week 12, up to 93.3% patients achieved at least a 30% relative reduction in liver fat content from baseline
- ✓ Potential Best-in-Class THR $\beta$  agonist
- ✓ PhII enrollment to be completed in Q4 2024

### ASC40 MASH

- ✓ Strategic partner Sagimet announced PhII biopsy data: met two primary endpoints
  - improvement of fibrosis by  $\geq 1$  stage with no worsening of NASH
  - NASH resolution with no worsening of fibrosis
- ✓ Plan to initiate PhIII in Q4 2024

### ASC40 Acne

- ✓ PhIII enrollment of 480 subjects started in Nov.2023
- ✓ First patient dosed in Jan.2024
- ✓ Enrollment expected to be finished in Q4 2024

### Focus on R&D

- ▣ Continued investment on R&D capabilities
- ▣ Focus on global FIC/BIC pipeline

### Focus on License-Out

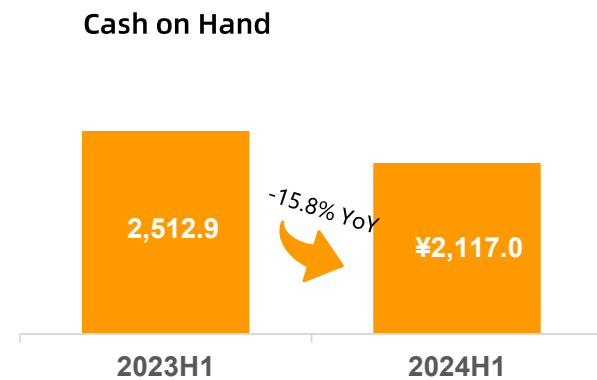
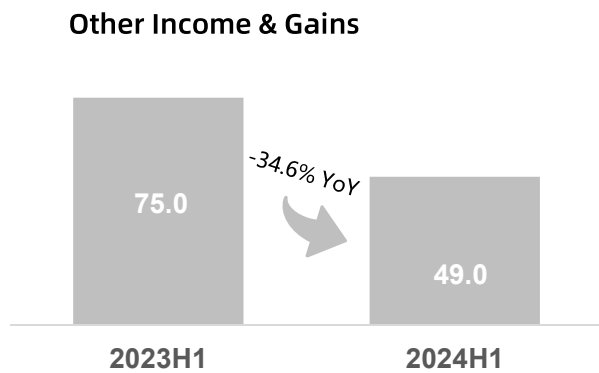
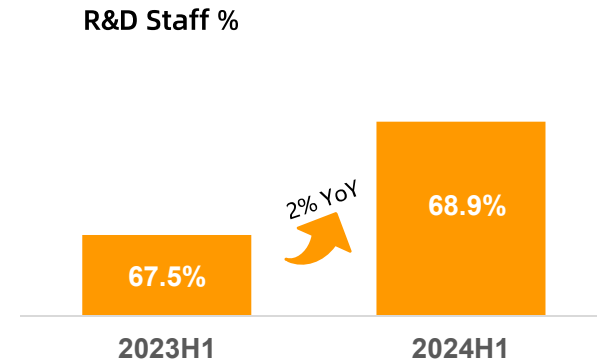
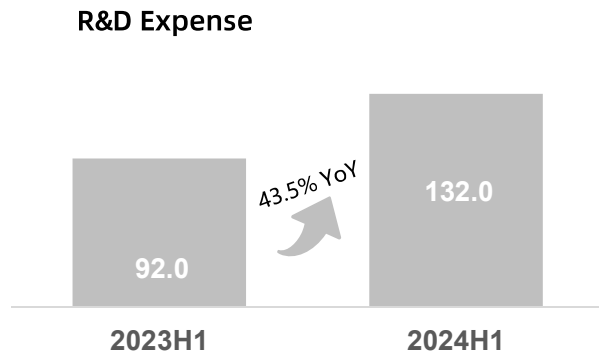
- ▣ Proactively seek license-out opportunities
- ▣ Maximize the value of our pipeline



### Focus on Efficiency

- ▣ Continued improve operation efficiency
- ▣ 2.1bn RMB funds is sufficient to support R&D and operation in next 5 years

## Sufficient Cash Supports Our Continuous Efforts on R&D Capabilities

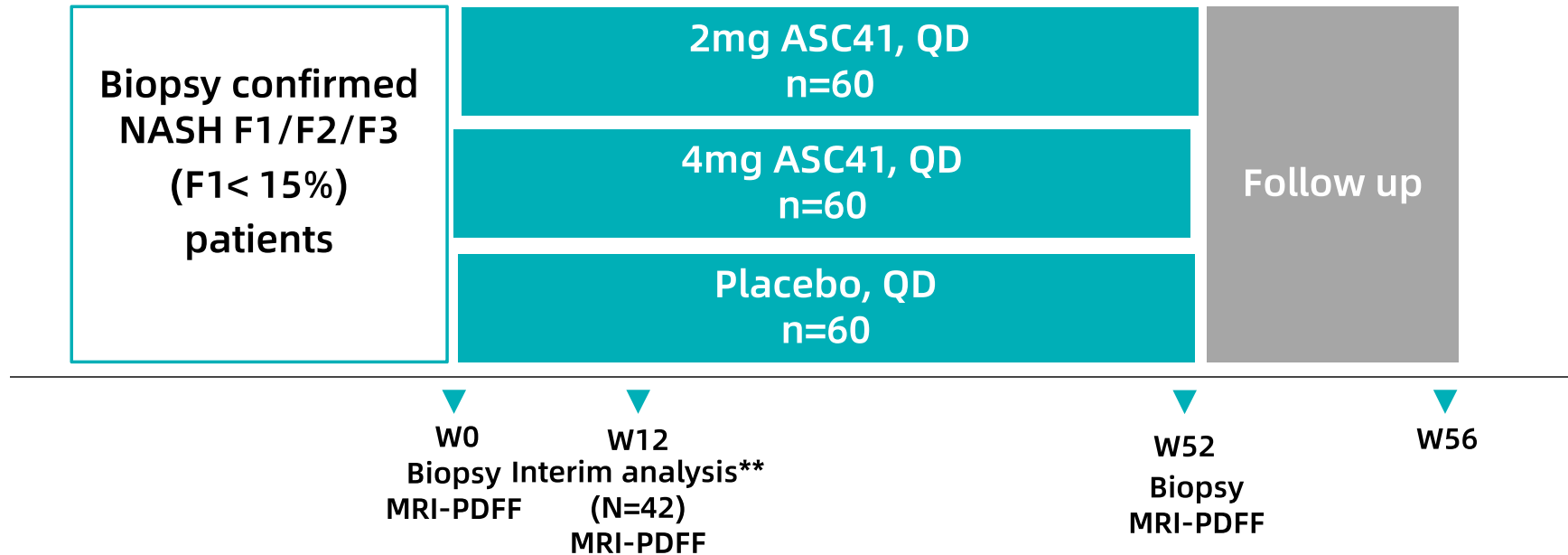
mm RMB





## Pipeline Highlights

ASC41: 52-week Phase II Study in Biopsy-confirmed NASH patients\*



**Primary Objective**

To evaluate the efficacy of ASC41 tablet in biopsy-confirmed noncirrhotic NASH patients by a histological reduction in NAS  $\geq 2$  points that results from reduction of necro-inflammation (inflammation or ballooning) without worsening fibrosis.

**Secondary objectives**

1. NASH resolution;
2. Fibrosis improvement.

\*Phase II study protocol was agreed by both US FDA and China NMPA

\*\*Pre-specified interim analysis conducted when 42 patients completed 12-week treatment of ASC41/placebo.



## Summary of Interim Week 12 Data from 52-Week ASC41 Tablet Study

### ■ Mean liver fat reduction

Up to **68.2%** mean liver fat reduction from baseline in biopsy-confirmed NASH patients receiving 12-week treatment of ASC41 tablet

### ■ ALT Reduction

At Week 12, placebo-adjusted mean reductions in alanine aminotransferase (ALT) from baseline was up to **37.8%**

### ■ Safety

Adverse events (AEs), including gastrointestinal (GI)-related AEs, were similar among the cohorts receiving ASC41 tablet treatment versus the placebo

### ■ Respond Rate

Up to **93.3%** patients achieved at least a 30% relative reduction in liver fat after 12-week treatment

### ■ AST Reduction

At Week 12, placebo-adjusted mean reductions in AST from baseline was up to **41.5%**

### ■ Lipids Decrease

At Week 12, placebo-adjusted mean reductions in LDL-C, TC and TG from baseline were up to

**27.7%, 23.4%**

and **46.5%**, respectively

## Reduction in Liver Fat Content from Baseline at Week 12 by MRI-PDFF

	Placebo (n = 14)	ASC41 Tablet	
		2 mg, QD (n = 13)	4 mg, QD (n = 15)
Mean baseline liver fat content	18.2%	17.8%	18.9%
Mean relative change in liver fat content from baseline	-13.1%	-55.0% (p = 0.0001 vs placebo)	-68.2% (p < 0.0001 vs placebo)
Median relative change in liver fat content from baseline	-5.8%	-48.8%	-70.1%
Percentage of patients achieving ≥ 30% relative reduction in liver fat content from baseline	21.4%	92.3% (p = 0.0002 vs placebo)	93.3% (p < 0.0001 vs placebo)
Percentage of patients achieving ≥ 50% relative reduction in liver fat content from baseline*	21.4%	46.2% (p = 0.24)	86.7% (p = 0.0004)
Percentage of patients achieving normalized liver fat (≤5% absolute liver fat content)*	0.0%	30.8% (p = 0.16)	66.7% (p = 0.0017)

≥ 30% reductions in liver fat content is highly associated with patients achieving histologic improvement in NASH

## Statistically Significant, Clinically Meaningful Reductions in ALT & AST at Week 12 Differentiate ASC41 from Other THR $\beta$ Agonists In Development

	Placebo (n = 14)	ASC41 Tablet	
		2 mg, QD (n = 13)	4 mg, QD (n = 15)
ALT			
Mean baseline ALT	77.6 U/L	65.9 U/L	84.8 U/L
Mean relative change in ALT from baseline*	5.2%	-8.5% (p = 0.61)	-32.6% (p = 0.0051)
Percentage of patients achieving mean ALT decrease > 17 U/L*	21.4%	30.8% (p = 0.68)	73.3% (p = 0.0052)
AST			
Mean baseline AST	47.9 U/L	44.2 U/L	53.8 U/L
Mean relative change in AST from baseline*	17.3%	-3.6% (p = 0.67)	-24.2% (p = 0.041)

*Decline in ALT in NASH patients is associated with improvement in liver histology*

\*p-value vs placebo

## Reduction in Lipids from Baseline at Week 12

	Placebo (n = 14)	ASC41 Tablet	
		2 mg, QD (n = 13)	4 mg, QD (n = 15)
LDL-C, mean change from baseline	4.3%	-19.4% (p = 0.0002 vs placebo)	-23.4% (p < 0.0001 vs placebo)
TC, mean change from baseline	3.4%	-16.8% (p < 0.0001 vs placebo)	-20.0% (p < 0.0001 vs placebo)
TG, mean change from baseline	3.9%	-30.6% (p = 0.0001 vs placebo)	-42.6% (p < 0.0001 vs placebo)

- HDL-C remained unchanged from baseline among the cohorts receiving ASC41 tablet treatment or placebo.
- Reductions in these lipids improve a patient's overall cardiometabolic profile and may reduce the risk of cardiovascular-related events.

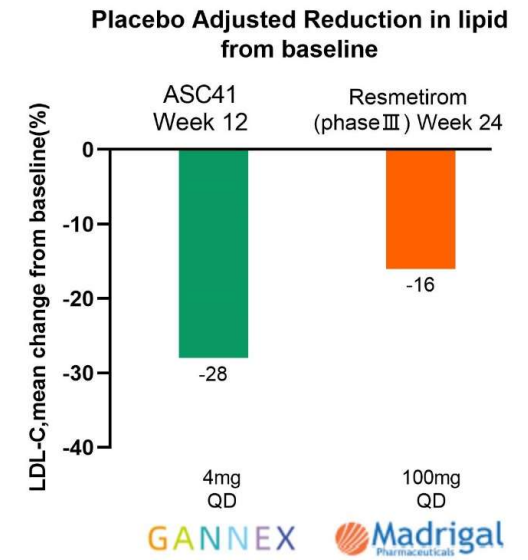
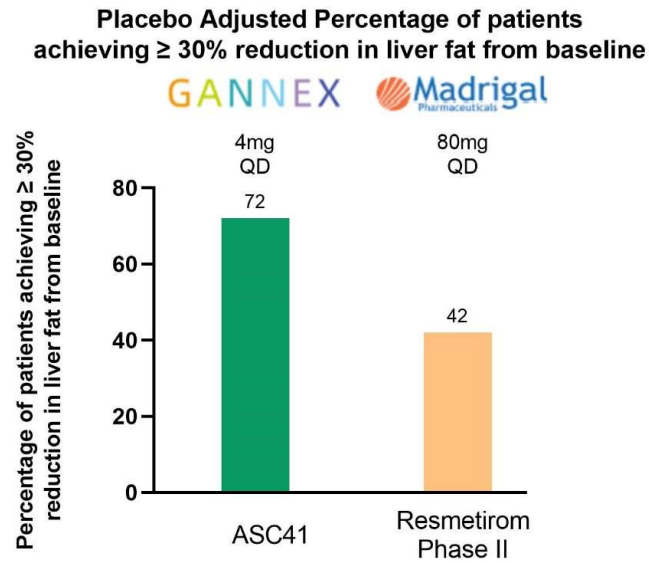
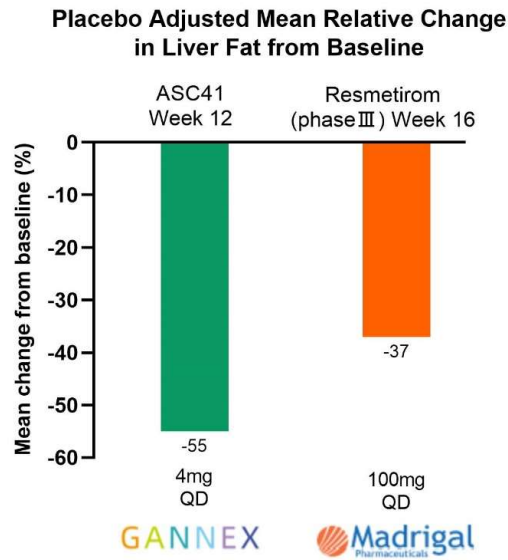
## Safety and Tolerability

	Placebo (n = 14)	ASC41 Tablet	
		2 mg, QD (n = 13)	4 mg, QD (n = 15)
TEAEs [1] Number of subjects (%)	13(92.9%)	13(100%)	15(100%)
Drug-related TEAEs [2]	6(42.9%)	7(53.9%)	7(46.7%)
Grade 1	6(42.9%)	7(53.9%)	7(46.7%)
Drug-related GI AEs	2(14.3%)	3(23.1%)	1(6.7%)
Nausea	0(0.0%)	0(0.0%)	0(0.0%)
Vomiting	0(0.0%)	0(0.0%)	0(0.0%)
Diarrhea	1(7.1%)	3(23.1%)	1(6.7%)
Abdominal distension	1(7.1%)	0(0.0%)	0(0.0%)
Abdominal pain (upper)	0(0.0%)	0(0.0%)	0(0.0%)
Constipation	0(0.0%)	0(0.0%)	0(0.0%)
Dyspepsia	0(0.0%)	0(0.0%)	0(0.0%)
Frequent bowel movements	0(0.0%)	0(0.0%)	0(0.0%)

- Levels of thyroid axis hormones, including thyroid stimulating hormone (TSH), free triiodothyronine (fT3) and free thyroxine (fT4) were relatively unchanged from baseline among the cohorts receiving ASC41 tablet treatment versus the placebo.
- Changes in vital signs and electrocardiogram (ECG) were similar among patients receiving ASC41 tablet treatment versus placebo.

[1]Data as of November 22, 2023;[2] Deemed by investigator as possibly, probably, or definitely related to study drug

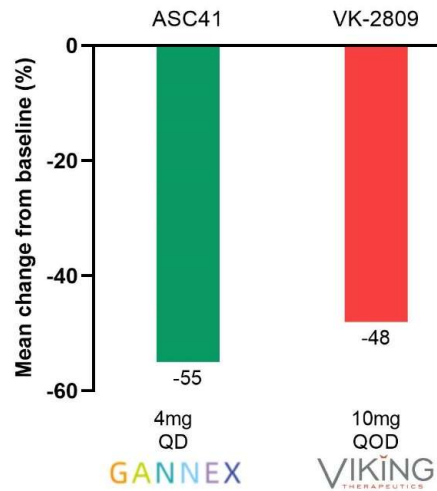
# THR $\beta$ Agonists: ASC41 vs Resmetirom



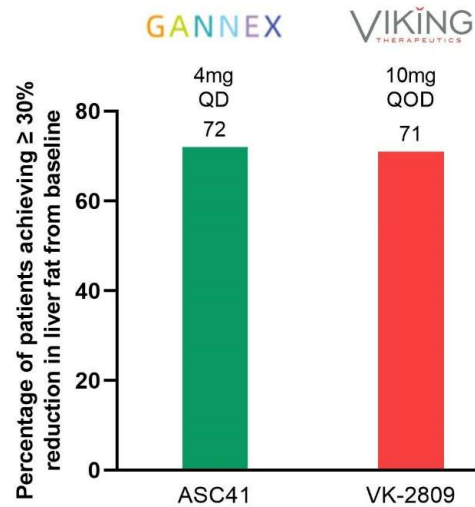
[1] Week 12 data from 36-week phase 2 and 52-week phase 3  
 [2] NA: Not available

# THRβ Agonists : ASC41 vs VK2809:

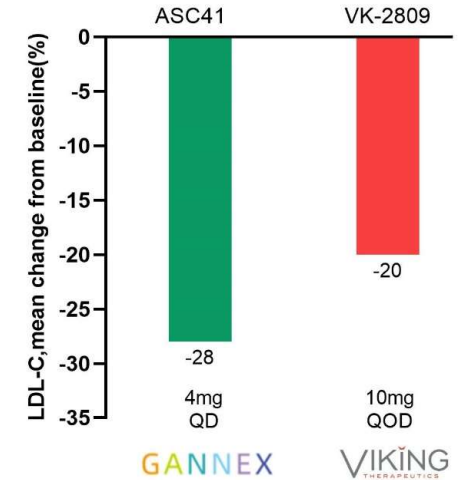
Placebo Adjusted Mean Relative Change in Liver Fat from Baseline (MRI-PDFF at Week 12)



Placebo Adjusted Percentage of patients achieving ≥ 30% reduction in liver fat from baseline



Placebo Adjusted Reduction in lipid from baseline at Week 12



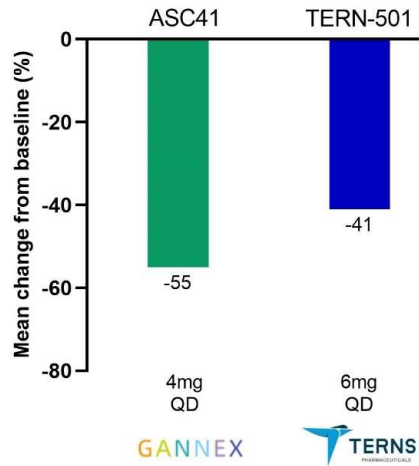
[1]Viking press release, May 2023

[2]NA:Not available

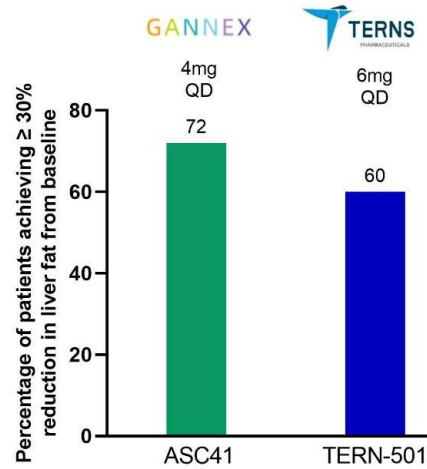
VK-2809: Rohit Loomba, et al. AASLD 2023 abstract number 5016-C; <https://ir.vikingtherapeutics.com/2023-11-13-Viking-Therapeutics-Presents-New-Data-from-Phase-2b-VOYAGE-Study-of-VK2809-in-Patients-with-Biopsy-Confirmed-Non-Alcoholic-Steatohepatitis-NASH-at-The-Liver-Meeting-R-2023>; <https://ir.vikingtherapeutics.com/corporatepresentation>, November 2023

# THR $\beta$ Agonists: ASC41 vs TERN-501

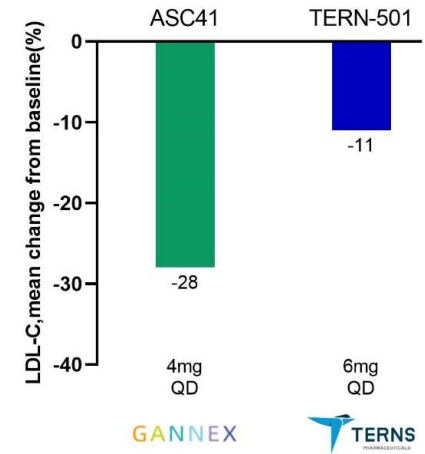
Placebo Adjusted Mean Relative Change in Liver Fat from Baseline(MRI-PDFF at Week 12)



Placebo Adjusted Percentage of patients achieving  $\geq 30\%$  reduction in liver fat from baseline



Placebo Adjusted Reduction in lipid from baseline at Week 12



[1] Terns press release, August 2023

[2] NA: Not available

TERN-501: <https://ir.ternspharma.com/events/event-details/terns-duet-top-line-results>



## Favorable Reduction in Liver Inflammatory Biomarkers Compared to other THR $\beta$ Agonists at 12 Weeks

Placebo-adjusted mean reductions in liver inflammatory biomarkers from baseline at Week 12	ASC41 tablet, stable at room temperature	Resmetirom tablet <sup>[1]</sup> , stable at room temperature	VK2809 Capsule <sup>[2]</sup> , stable only under refrigeration	Tern-501 <sup>[3]</sup> , formulation and storage condition unknown
ALT	Up to 37.8% (Statistically significant difference vs placebo)	No statistically significant difference vs placebo	Similar to placebo	Similar to placebo
AST	Up to 41.5% (Statistically significant difference vs placebo)	No statistically significant difference vs placebo	Similar to placebo	Similar to placebo

[1] Week 12 data from 36-week phase 2 and 52-week phase 3

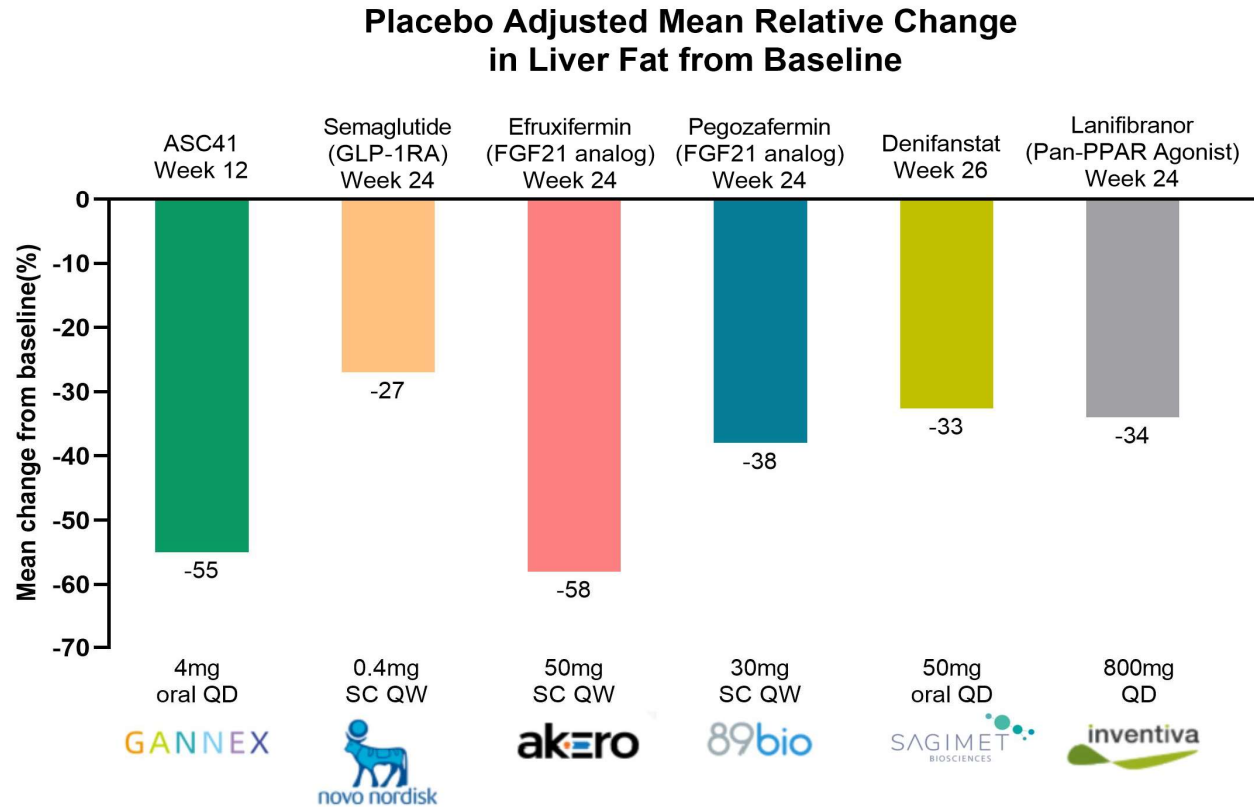
[2] Viking press release, May 2023

[3] Terns press release, August 2023

## Favorable Safety Profile Compared to other THR $\beta$ Agonists

	ASC41 tablet		Resmetirom tablet Phase III		VK2809 Capsule		Tern-501	
	Placebo (n = 14)	2mg/4mg QD (n=28)	Placebo (n = 321)	100mg QD (n=323)	Placebo (n = 65)	10mg QOD (n=61)	Placebo (n =24)	6mg QD (n=22)
TEAEs Number of subjects(%)	13(92.9%)	28(100%)	269(92.2%)	296 (91.6%)	47(72.3%)	54(88.5%)	NA	NA
Drug-related TEAEs	6(42.9%)	14(50%)	86 (26.8%)	134(41.5%)	22(33.8%)	23(37.7%)	NA	NA
Drug-related TEAEs leading to study discontinuation	0(0.0%)	1(3.6%)	8 (2.5%)	22 (6.8%)	5(7.7%)	5(8.2%)	1(4.2%)	1(4.5%)
Drug-related GI AEs	2(14.3%)	4(14.3%)	NA	NA	12(18.5%)	7(11.5%)	2(8.3%)	2(9.1%)
Nausea	0(0.0%)	0(0.0%)	40 (12.5%)	62 (19.2%)	5(7.7%)	3(4.9%)	0(0.0%)	0(0.0%)
Diarrhea	1(7.1%)	4(14.3%)	50 (15.6%)	109(33.7%)	2(3.1%)	3(4.9%)	1(4.2%)	1(4.5%)
Vomiting	0(0.0%)	0(0.0%)	17 (5.3%)	35 (10.8%)	NA	NA	1(4.2%)	0(0.0%)
Abdominal distension	1(7.1%)	0(0.0%)	NA	NA	NA	NA	0(0.0%)	0(0.0%)

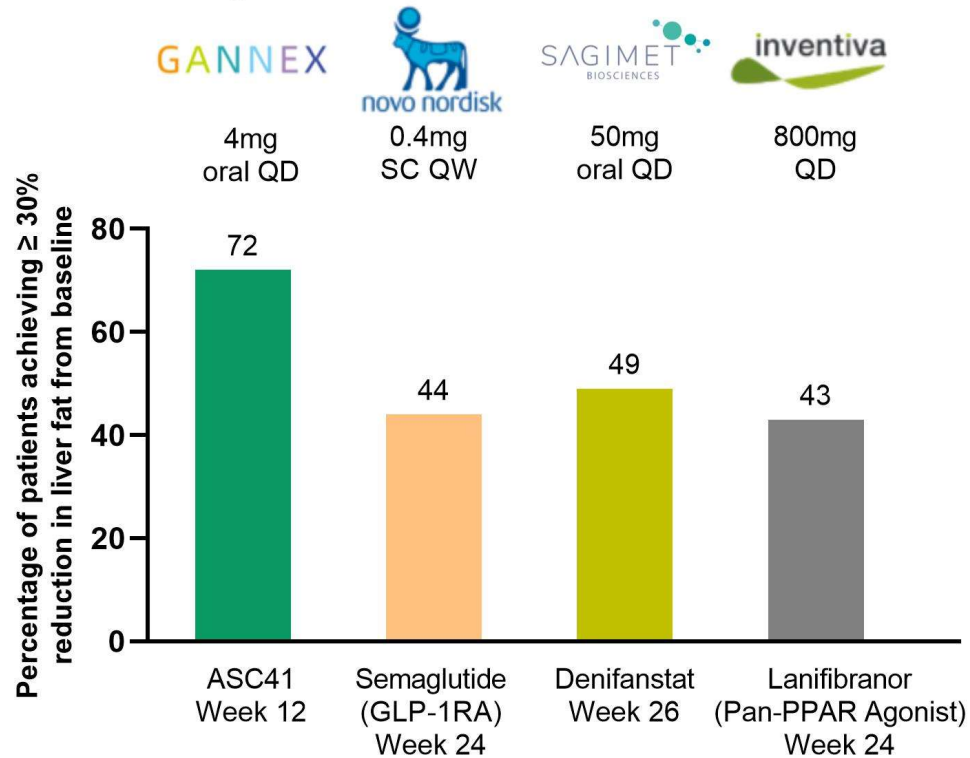
# ASC41 vs GLP-1, FGF21, FASN and PPAR: Liver Fat Reduction



1. Semaglutide: Flint, A., et al.[J] Aliment Pharmacol Ther, (2021).DOI: 10.1111/apt.16608;
2. Efruxifermin: Stephen A. Harrison., et al. AASLD 2022 Abstract #39094;
3. Pegzofermin: <https://ir.89bio.com/news-releases/news-release-details/89bios-phase-2b-enliven-trial-pegzofermin-nonalcoholic>;
4. Denifanstat: Rohit Loomba, et al. EASL 2023 Abstract #OS-061;
5. Lanifibranor: <https://inventivapharma.com/wp-content/uploads/2023/06/IVA-Topline-results-lanifibranor-in-T2D-and-NASH-FLD-06282023.pdf>

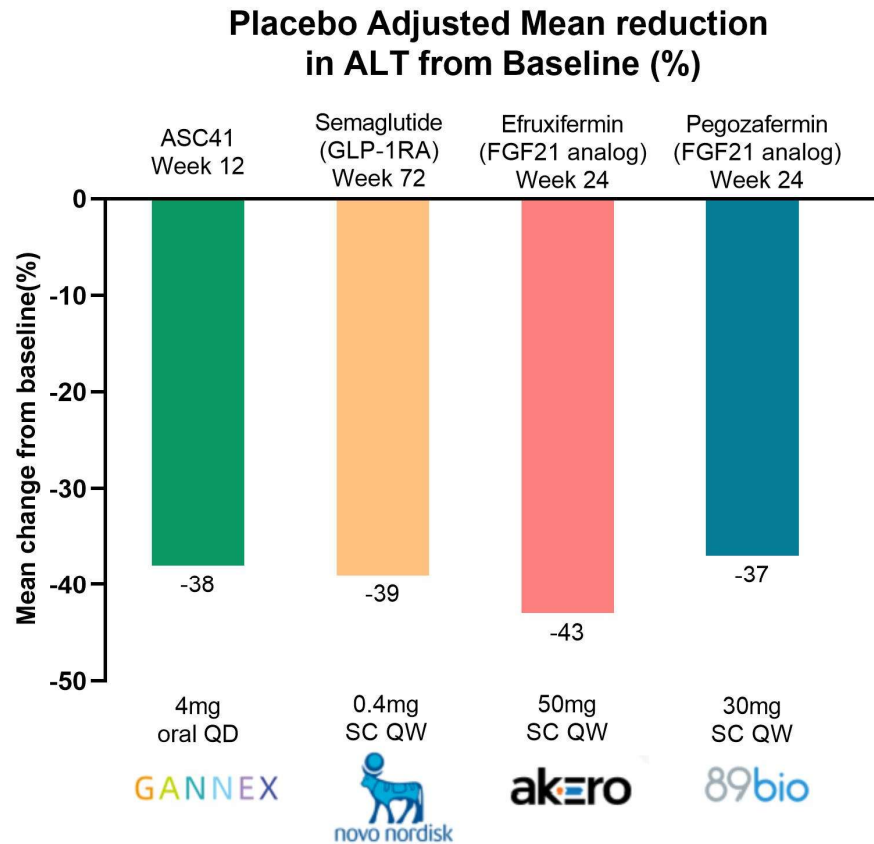
## ASC41 vs GLP-1, FASN and PPAR: $\geq 30\%$ Liver Fat Reduction

Placebo Adjusted Percentage of patients achieving  $\geq 30\%$  reduction in liver fat from baseline



1. Semaglutide: Flint, A., et al. [J] Aliment Pharmacol Ther, (2021), DOI: 10.1111/apt.16608;
2. Denifanstat: Rohit Loomba, et al. EASL 2023 Abstract #OS-061;
3. Lanifibranor: <https://inventivapharma.com/wp-content/uploads/2023/06/IVA-Topline-results-lanifibranor-in-T2D-and-NASH-06282023.pdf>

## ASC41 vs GLP-1 and FGF21: Reduction in ALT



1. Semaglutide: Newsome, P. N., et al. [J] N Engl J Med, (2021). DOI: 10.1056/NEJMoa2028395;
2. Efruxifermin: Stephen A. Harrison., et al. AASLD 2022 Abstract #39094;
3. Pegozafermin: <https://ir.89bio.com/news-releases/news-release-details/89bios-phase-2b-enliven-trial-pegozafermin-nonalcoholic>;

## Conclusions of ASC41 Interim Data



- Interim data in liver fat and lipids at Week 12 demonstrated ASC41 as a potential best-in-class THR $\beta$  Agonist vs other THR $\beta$  agonists currently at clinical or registration stages



- Statistically significant and clinical meaningful reductions in ALT and AST in patients receiving ASC41 tablet treatment notably differentiate ASC41 from other THR $\beta$  agonists



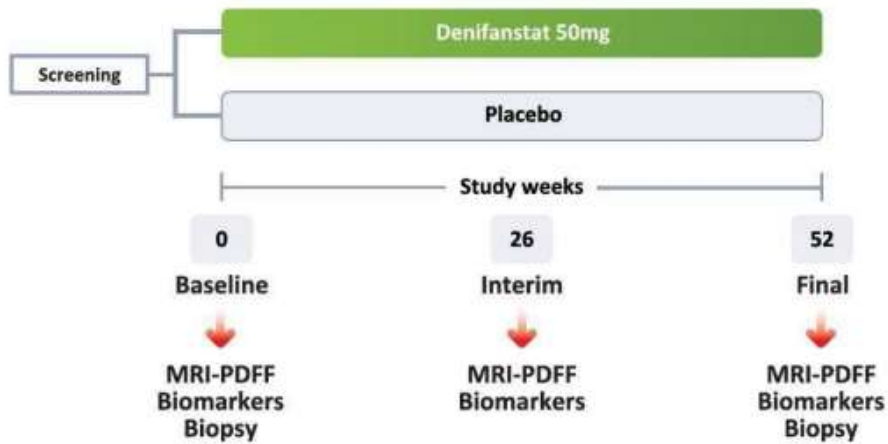
- ASC41 tablet showed excellent safety and tolerability profile, including GI.

## Patents of ASC41

	Application Date	Publication Number	Patents Applied	Patents Authorized	Pending
<b>Formulation Patent (Tablet)</b>	2020/3/27	US20210308155A1 (U.S.) CN115427022A (China) WO2021190624A1 (PCT)	U.S., China and Globally	U.S.	China and Globally
<b>Crystal Patent</b>	2020/9/30	CN114315902A (China) WO2022067602A1 (Globally)	China and Globally	\	China and Globally
<b>Synthesis Patent</b>	2020/2/18	US11292805B2 (U.S.) US20220332738A1 (U.S.) CN113336792A (China)	U.S. and China	U.S.	China
<b>Composition Patent</b>	2021/7/6	WO2023280152A1 (PCT)	U.S., China and Globally	\	U.S., China

# ASC40(FASN)NASH | Phase IIb Clinical Trial Design

## FASCINATE-2 Phase 2b trial design



- Biopsy confirmed F2-F3 NASH patients
- 52 weeks, 2:1 50mg or placebo, double-blind

## Primary endpoints

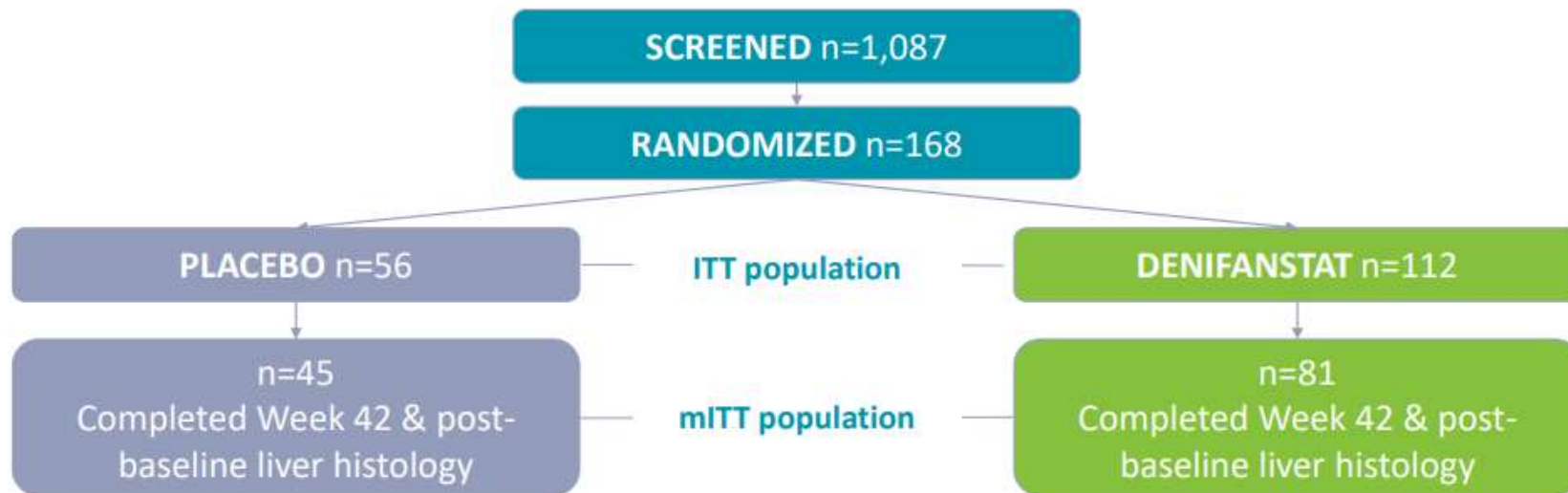
- NAS  $\geq 2$  points improvement w/o worsening of fibrosis OR
- NASH resolution + NAS  $\geq 2$  improvement w/o worsening of fibrosis

## Other selected endpoints

- Improvement in liver fibrosis  $\geq 1$  stage without worsening of NASH (Bx)
- Digital AI pathology
- MRI-PDFF: absolute decrease, % change from baseline, % pts  $\geq 30\%$  reduction from baseline (responders)



ASC40(FASN) NASH | Phase IIb Screening and Randomization



## ASC40 NASH Phase IIb Baseline Characteristics Typical F2/F3 MASH Population

Parameter	Placebo, n=45	Denifanstat, n=81
Age, years	59.6 (+/- 10.9)	56.1 (+/- 10.8)
Sex, female	27 (60%)	48 (59%)
Race, White	41 (91%)	73 (90%)
Ethnicity, Hispanic or Latino	15 (33%)	27 (33%)
BMI, kg/m <sup>2</sup>	36.5 (+/- 6.7)	34.6 (+/- 6.1)
Type 2 diabetes	27 (60%)	55 (68%)
ALT (alanine aminotransferase) U/L	67 (+/- 33)	57 (+/- 29)
AST (aspartate aminotransferase) U/L	52 (+/- 27)	48 (+/- 29)
Liver Fat Content (MRI-PDFF), %	19.0 (+/- 7.0)	16.6 (+/- 7.1)
Baseline liver biopsy NAS ≥ 5	34 (76%)	63 (78%)
Baseline liver biopsy F2/F3	22 (49%) / 23 (51%)	34 (42%) / 47 (58%)
Statin (at baseline)	21 (47%)	38 (47%)
GLP1-RA (at baseline)	4 (9%)	12 (15%)
LDL, mg/dL	103 (+/- 39)	96 (+/- 34)
Triglycerides, mg/dL	153 (+/- 67)	173 (+/- 79)
ELF (Enhanced Liver Fibrosis) Score	9.8 (+/- 0.8)	9.6 (+/- 0.8)
FAST (Fibroscan AST) Score	0.6 (0.19)	0.6 (0.20)

## ASC40 NASH Phase IIb Biopsy Results

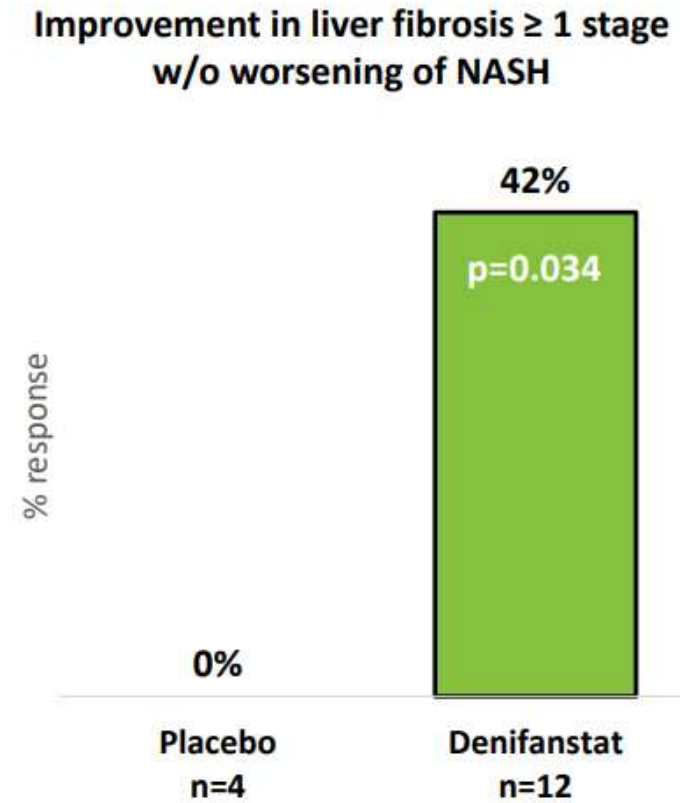
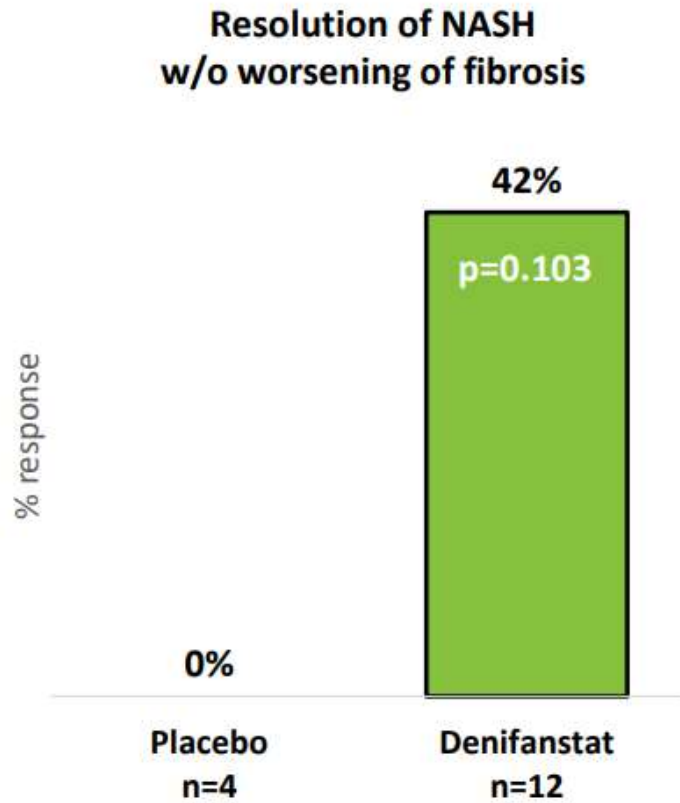
	Placebo (n=45)	ASC40 50 mg (n=81)	Placebo adjusted	<i>P value</i>
<b>Primary Endpoints</b>				
NASH resolution + NAS $\geq$ 2 improvement w/o worsening of fibrosis	13%	36%	23%	0.0022
NAS $\geq$ 2 points improvement* w/o worsening of fibrosis	20%	52%	32%	0.0001
<b>Other Endpoints</b>				
Improvement in liver fibrosis $\geq$ 1 stage w/o worsening of NASH	18%	41%	23%	0.0051
Resolution of NASH w/o worsening of fibrosis	16%	38%	22%	0.0021
AI Digital Pathology (qFibrosis)**	0.1	-0.3	-0.4	0.0023
ALT % from baseline	-17.2%	-30.5%	-13.3%	0.0300
MRI-PDFF respond rate (>30% reduction)	21%	65%	44%	<0.0001
FibroScan AST (FAST) 评分	-0.1	-0.3	-0.2	<0.0001
LDL-C (mg/dL)***	-9.1	-19.1	-10.0	--

\*  $\geq$ 1-point improvement in ballooning or inflammation.

\*\*least squares mean. HistoIndex platform. mITT population.

\*\*\*For LDL-c, baseline > 100 mg/dL.

NASH Patient Subset on Stable GLP1-RA at Baseline: Liver Biopsy ASC40 Improves NASH Resolution and Fibrosis



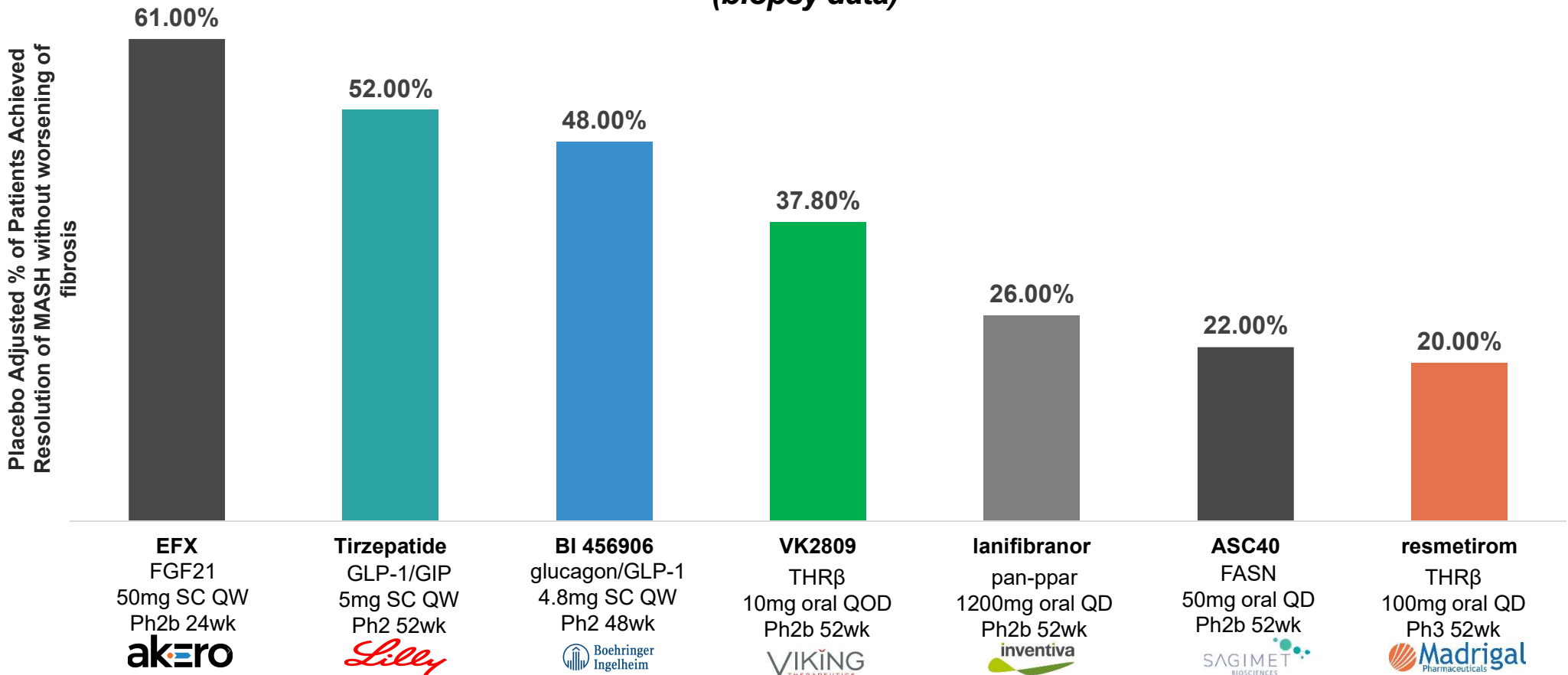
## ASC40(FASN)NASH | Phase IIb Safety Profile

Parameter	Placebo n=56	Denifanstat N=112
Any TEAE (treatment emergent adverse event)	45 (80.4%)	96 (85.7%)
TEAE related to study drug	20 (35.7%)	51 (45.5%)
Most common TEAE related to study drug in ≥5% of patients by system organ class		
eye disorders	9 (16.1%)	17 (15.2%)
gastrointestinal disorders	5 (8.9%)	13 (11.6%)
skin and subcutaneous tissue disorders	4 (7.1%)	25 (22.3%)
TEAE leading to study drug discontinuation	3 (5.4%)	22 (19.6%)
TEAE with CTCAE Grade 3 (Severe) or higher*	3 (5.4%)	13 (11.6%)
SAE (none related to treatment)	3 (5.4%)	13 (11.6%)
Fatal TEAE	0	0

\* No treatment-related AE was Grade 3 or higher

## Comparison of MASH Candidates (Not Head to Head)

### Placebo Adjusted % of Patients Achieved Resolution of MASH without worsening of fibrosis (biopsy data)



1. Per protocol, <https://ir.akerotx.com/news-releases/news-release-details/akero-therapeutics-presents-poster-and-late-breaking-oral>

2. ITT, <https://www.nejm.org/doi/full/10.1056/NEJMoa2401943>

3. mITT, <https://www.nejm.org/doi/full/10.1056/NEJMoa2401755>

4. ITT, <https://ir.vikingtherapeutics.com/2024-06-04-Viking-Therapeutics-Announces-Positive-52-Week-Histologic-Data-from-Phase-2b-VOYAGE-Study-of-VK2809-in-Patients-with-Biopsy-Confirmed-Non-Alcoholic-Steatohepatitis-MASH>

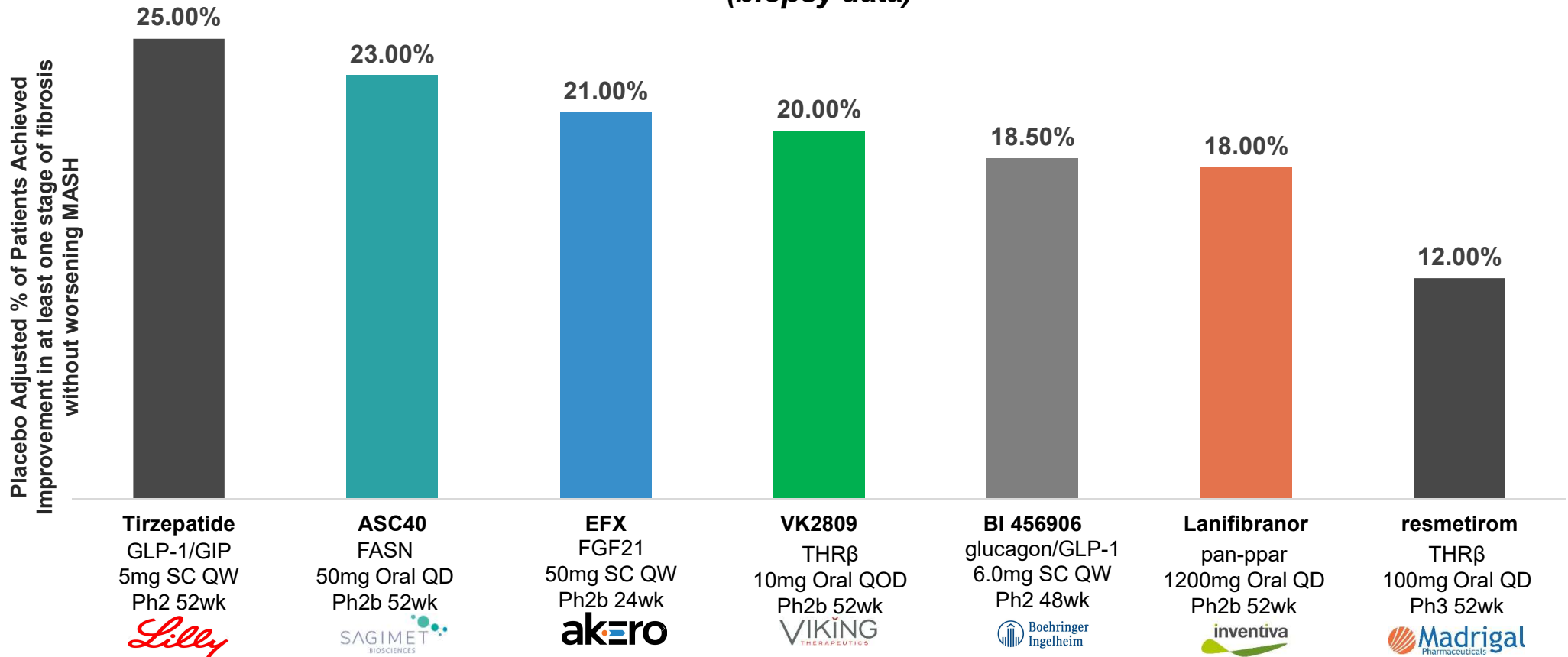
5. ITT, <https://inventivapharma.com/wp-content/uploads/2024/04/04-Inventiva-Presentation-ENG-04032024-2.pdf>

6. mITT, <https://ir.sagimet.com/news-releases/news-release-details/sagimet-biosciences-announces-positive-topline-results-phase-2b>

7. mITT, <https://ir.madrigalpharma.com/news-releases/news-release-details/madrigal-announces-positive-topline-results-pivotal-phase-3>

## Comparison of MASH Candidates (Not Head to Head)

**Placebo Adjusted % of Patients Achieved Improvement in at least one stage of fibrosis without worsening MASH (biopsy data)**



1.ITT, <https://www.nejm.org/doi/full/10.1056/NEJMoa2401943>

2.mITT, <https://ir.sagimet.com/news-releases/news-release-details/sagimet-biosciences-announces-positive-topline-results-phase-2b>

3.Per protocol, <https://ir.akerotx.com/news-releases/news-release-details/akero-therapeutics-presents-poster-and-late-breaking-oral>

4.IITT, <https://ir.vikingtherapeutics.com/2024-06-04-Viking-Therapeutics-Announces-Positive-52-Week-Histologic-Data-from-Phase-2b-VOYAGE-Study-of-VK2809-in-Patients-with-Biopsy-Confirmed-Non-Alcoholic-Steatohepatitis-MASH>

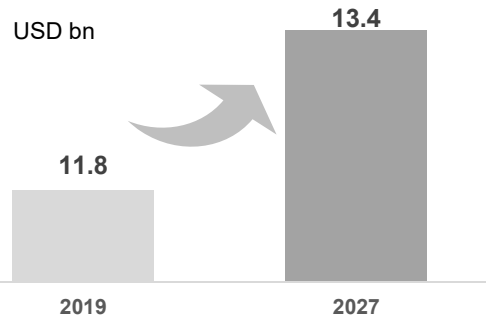
5.mITT, <https://www.nejm.org/doi/full/10.1056/NEJMoa2401755>

6.IITT, <https://inventivapharma.com/wp-content/uploads/2024/04/04-Inventiva-Presentation-ENG-04032024-2.pdf>

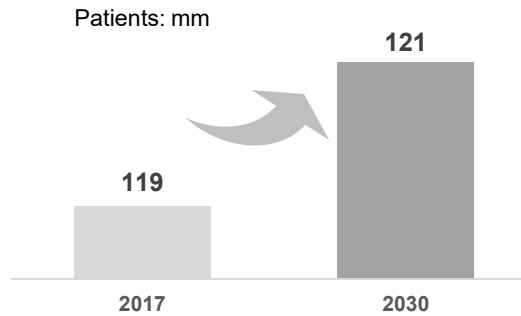
7.mITT, <https://ir.madrigalpharma.com/news-releases/news-release-details/madrigal-announces-positive-topline-results-pivotal-phase-3>

# Acne: the Eighth Most Prevalent Disease with 640+ mm Patients Globally

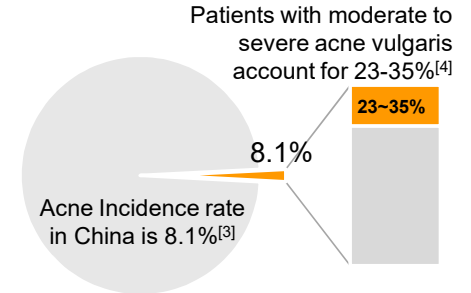
## Global Acne Market Forecast<sup>[1]</sup>



## Acne Patients Growth in China<sup>[2]</sup>



## High Prevalence in China



## Multiple Factors Contribute to the Incidence Rise<sup>[2]</sup>

- Work and life pressure
- High sugar, spicy and greasy diet
- Pollution
- Unhealthy lifestyle
- endocrine disorder
- excessive sebum production
- inflammation

## Limitations of Current Treatment

- Oral antibiotics**
  - antibiotic resistance<sup>[5]</sup>
  - Side effects including GI reactions /rash/liver damage
- Oral isotretinoin** <sup>[5]</sup>
  - Over 10 kinds of side effects<sup>[6]</sup>
  - Liver damage<sup>[6]</sup>
- Topical medications**
  - Light sensitive
  - 30% to 40% of patients do not adhere to their topical treatments <sup>[7]</sup>

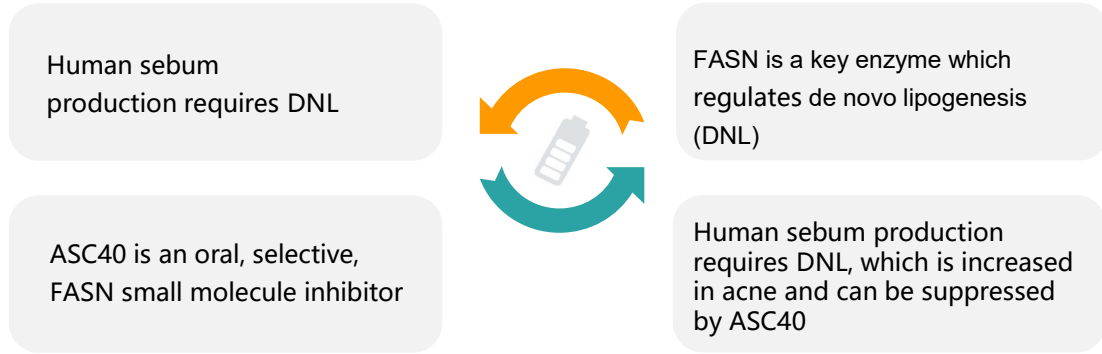
### References:

- Allied Market Research
- Frost & Sullivan Report
- Li D, Chen Q, Liu Y, et al. *BMJ Open*. 2017 Apr;7(4):e015354. DOI: 10.1136/bmjopen-2016-015354.
- Shen Y, Wang T, Zhou C, et al. *Acta Derm Venereol*. 2012;92(1):40-44. doi:10.2340/00015555-1164
- Guideline for Diagnosis and Treatment of Acne (The 2019 Revised Edition)
- Brzezinski P, Borowska K, Chiriac A, Smigielski J. *Dermatol Ther*. 2017;30(4):10.1111/dth.12483. doi:10.1111/dth.12483
- Purvis CG, Balogh EA, Feldman SR. *Ann Pharmacother*. 2021;55(10):1297-1299.



# ASC40 (FASN) for Acne: Phase III Enrollment to Be Completed in 2024Q4

## ASC40: Innovative Mechanism for Acne Treatment



## ASC40 Acne Phase III Trial

- Phase III trial of ASC40 initiated in Q4, 2023
- Plan to enroll 480 pts in China



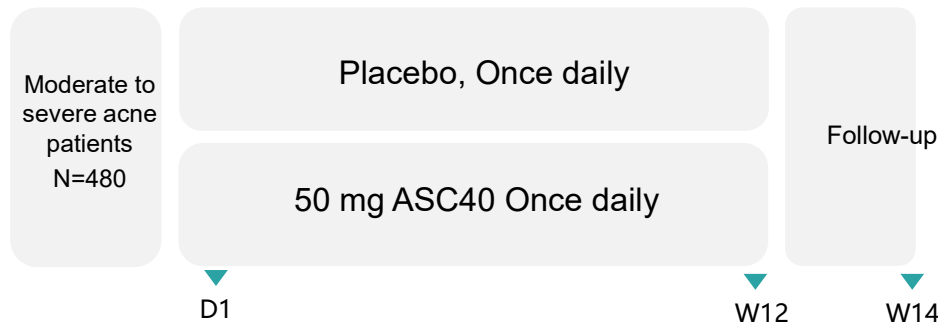
China's top dermatology clinical center –Huashan Hospital, Fudan University– leads the study

1.Guideline for Diagnosis and Treatment of Acne (The 2019 Revised Edition)

## Inclusion Criteria

- ◆ 18-40 years old (including 18 and 40); baseline IGA score of 3-4
- ◆ Subjects should have facial lesions counted as follows:  
Inflammatory lesions 30~75 (30 ~ 75 papules, pustules, and nodules, among which no more than 2 nodules)
- ◆ Non-inflammatory lesions 30 ~ 100 (30 ~ 100 open and closed pimples)

## Phase III Clinical Trial Design





## Primary Endpoints


- ◆ % change in total lesion count from baseline at week 12 of the treatment
- ◆ % change in inflammatory lesion count from baseline at week 12 of the treatment
- ◆ % of patients with a decrease of  $\geq 2$  points from baseline in the investigator's overall static score (IGA) and reached 0 or 1 point at week 12 of the treatment

## Placebo Adjusted Efficacy of 50 mg ASC40, Oral, Once daily is Superior to Placebo Adjusted Efficacy of Winlevi® (not head-to-head comparison)

Endpoints	50 mg ASC40, oral, once daily (n=44), placebo adjusted	1% Clascoterone cream twice daily for 12 weeks, placebo adjusted	
	Phase II	Phase II	Phase III
% change from baseline in total lesion count at week 12 <sup>§</sup> <i>(primary endpoint)</i>	<b>-27.1</b>	NA	<b>-11.9</b>
% change from baseline in inflammatory lesion count at week 12 <sup>§</sup> <i>(key secondary endpoint)</i>	<b>-33.6</b>	<b>-13.4</b>	<b>-12.8</b>
Absolute change from baseline in inflammatory lesion count at week 12 <i>(key secondary endpoint)</i>	<b>-13</b>	<b>-3.2</b>	<b>-5.6</b>
% Treatment success at week 12	<b>14.3</b>	<b>7.5</b>	<b>11.6</b>

 **Efficacy:** Compared to placebo, all ASC40 groups (25, 50 and 75 mg) showed statistically significant benefits to acne patients in % change from baseline in total (primary) and inflammatory (key secondary) lesion counts at week 12

 **Safety:** At all doses, oral ASC40 with once-daily, 12-week treatment was safe and well tolerated

 **In Comparison with Winlevi® :** 1%, twice daily, placebo adjusted efficacy of 50 mg ASC40, oral, once daily is superior to Winlevi® in terms of % change from baseline in total and inflammatory lesion counts at week 12 as well as % treatment success at week 12

## Safety Data Analysis: ASC40 (FASN) for Acne is Safe and Well Tolerated

Category	25mg dose group (n=45)		50mg dose group (n=44)		75 mg dose group (n=45)		Placebo group (n=45)	
	Number	Incidence(%)	Number	Incidence(%)	Number	Incidence(%)	Number	Incidence(%)
Drug-related TEAE	22	48.89%	21	47.73%	28	62.22%	22	48.89%
Drug-related TEAE of severity Grade 3 or higher	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Drug-related severe adverse event (SAE)	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Drug-related TEAE leading to discontinuation of the study drug	1	2.22%	1	2.27%	3	6.67%	0	0.00%
Drug-related TEAE leading to subject withdrawal from the study	1	2.22%	0	0.00%	3	6.67%	0	0.00%
Drug-related TEAE leading to death	0	0.00%	0	0.00%	0	0.00%	0	0.00%

TEAE: treatment-emergent adverse event.

## Sarecycline Phase II vs ASC40 Phase II in ILC & NILC

Parameters	Sarecycline (1.5mg/kg)	ASC40 (50mg)	
	Phase 2, LSM[1]	Phase 2, Median[2]	Phase 2, Mean[2]
Patient number	70	44	44
change from baseline in percentage ILC: vs PBO, %	52.7 vs 38.3	65.0 vs 31.4	56.7 vs 36.5
p	0.02	0.003	0.003
change from baseline in absolute ILC: ILC vs PBO	16.9 vs 12.5	26 vs 13	24.9 vs 15.3
p	0.03	0.003	0.003
change from baseline in percentage NILC: vs PBO, %	37.5 vs 35.2	58.0 vs 42.9	46.6 vs 35.0
p	0.68	0.113	0.113
change from baseline in absolute NILC: ILC vs PBO	19.4 vs 17.9	28.5 vs 24.0	28.5 vs 22.1
p	0.63	0.196	0.196

Sarecycline is an oral, tetracycline derivatives antibiotic acne drug developed by Almirall. It was launched in the US in October 2018 and is mainly used to treat patients aged 9 years and older with moderate to severe acne vulgaris

ILC: Inflammatory Lesion Counts; NILC: Non-Inflammatory Lesion Counts; LSM: least squared mean; NA: not available; CSR: clinical study report; PR: from press release.

[1]. Leyden, J. J., et al.[J] J Drugs Dermatol, (2018); [2] Data from CSR;

## Sarecycline Phase III vs ASC40 Phase II in ILC & NILC

Parameters	Sarecycline (1.5mg/kg)		ASC40 (50mg)	
	SC1401 Phase3, Mean[1]	SC1402 Phase3, Mean[1]	Phase 2, Median[2]	Phase 2, Mean[2]
Patient number	483	519	44	44
change from baseline in percentage ILC: vs PBO, %	52.2 vs 35.2	50.8 vs 36.4	65.0 vs 31.4	56.7 vs 36.5
p	<0.001	<0.001	0.003	0.003
change from baseline in absolute ILC: ILC vs PBO	15.3 vs 10.2	15.5 vs 11.1	26 vs 13	24.9 vs 15.3
p	<0.001	<0.001	0.003	0.003
change from baseline in percentage NILC: vs PBO, %	25.1 vs 22.2	28.5 vs 22.5	58.0 vs 42.9	46.6 vs 35.0
p	0.579	NA	0.113	0.113
change from baseline in absolute NILC: ILC vs PBO	14.7 vs 11.2	16.6 vs 14.7	28.5 vs 24.0	28.5 vs 22.1
p	0.001	NA	0.196	0.196

ILC: Inflammatory Lesion Counts; NILC: Non-Inflammatory Lesion Counts; LSM: least squared mean; NA: not available; CSR: clinical study report; PR: from press release.

[1]. Sarecycline review file 209521Orig1s000

[2]. Data from CSR;

# rGBM: Huge Unmet Medical Needs Globally

## GBM: One of the Most Malignant

- 48%**  
GBM as 48% of total CNS cancer
- 15k<sup>[1]</sup>**  
Incidence in US
- 40~64k<sup>[2]</sup>**  
Incidence in China
- ~100%<sup>[2]</sup>**  
Recurrent rate
- 5.8%<sup>[3]</sup>**  
5yr survival rate
- 12~14 months<sup>[3]</sup>**  
Median OS
- WHO IV**  
High malignant grade
- No SoC**  
For rGBM patients

SoC: standard of care

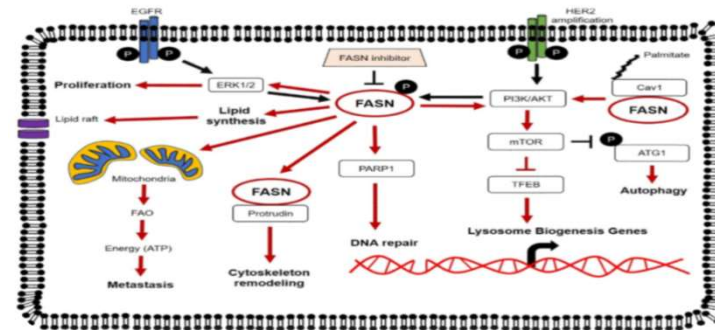
## MoA of FASN: Lipid Metabolism<sup>[4]</sup>

- Tumor cells rely on de novo synthesis of fatty acids for growth
- FASN plays a crucial role in maintaining energy metabolism and cell membrane structural homeostasis in tumor cells
- FASN is the only enzyme in the human body that can convert glucose metabolites to palmitate
- Palmitate saturated fatty acids are important components of the growth chain, polyunsaturated fatty acids, and essential components of cell signaling
- FASN is highly expressed in a variety of tumors, supports tumor cell growth and proliferation, and is associated with tumor invasion

## rGBM Treatments are Limited

- Surgical resection** : lack of high-level evidence-based medical evidence for the benefit of surgical treatment of recurrent glioma
- Radiation therapy**: radiation may cause severe brain damage
- chemotherapy**: no standard chemotherapy for rGBM patients
- TTF**: no OS improvement compared with chemotherapy<sup>[6]</sup>, low affordability

## FASN Plays A Key Role in Cancer<sup>[5]</sup>



(Molecules. 2020 Sep; 25(17): 3935.)

1. Ostrom, Quinn T et al. "CBTRUS Statistical Report: Primary Brain and Other Central Nervous System Tumors Diagnosed in the United States in 2015-2019." Neuro-oncology vol. 24, Suppl 5 (2022): v1-v95. doi:10.1093/neuonc/noac202  
 2. 中国卫健委, 脑胶质瘤诊疗指南 (2022年版本)  
 3. Stupp R, Mason W P, van den Bent M J, et al. Radiotherapy plus concomitant and adjuvant temozolomide for glioblastoma [J]. Kelly, William et al.  
 4. Tan A C, Ashley D M, Lopez G Y, et al. Management of glioblastoma: State of the art and future directions [J]  
 5. Fhu CW, Ali A. ):3935. doi:10.3390/molecules25173935  
 6. Stupp R, Wong ET, Kanner AA, et al. NovoTTF-100A versus physician's choice chemotherapy in recurrent glioblastoma: a randomised phase III trial of a novel treatment modality. Eur J Cancer. 2012;48(14):2192-2202

# ASC40(FASN) for rGBM: Phase III Interim Analysis Expected in 2H 2024

## ASC40(TVB-2640)+BEV Phase II Study<sup>[1]\*</sup>

**Objective Response Rate 56%**  
**Complete Response 17%**  
**Partial Response 39%<sup>[1]</sup>**

- 25 patients enrolled
- All treated with ASC40 (TVB-2640) (100 mg/m<sup>2</sup> PO QD) plus BEV (10 mg/kg IV D1, 15) until disease progression or toxicity was intolerable

## Phase II Results: mPFS=4.6, mOS=8.9

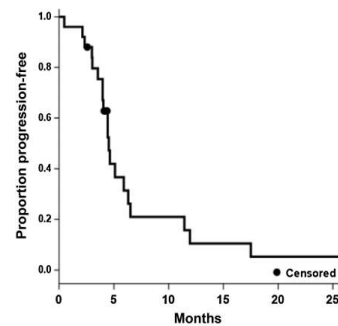


Figure 1. Kaplan-Meier estimate of progression (all patients, N=25; median = 4.5; 95% CI, 4.0-6.3).

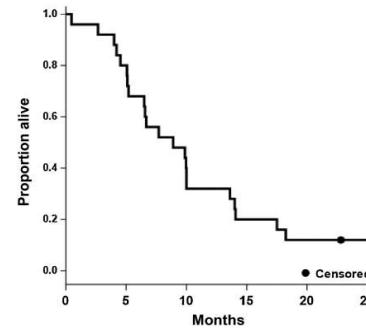


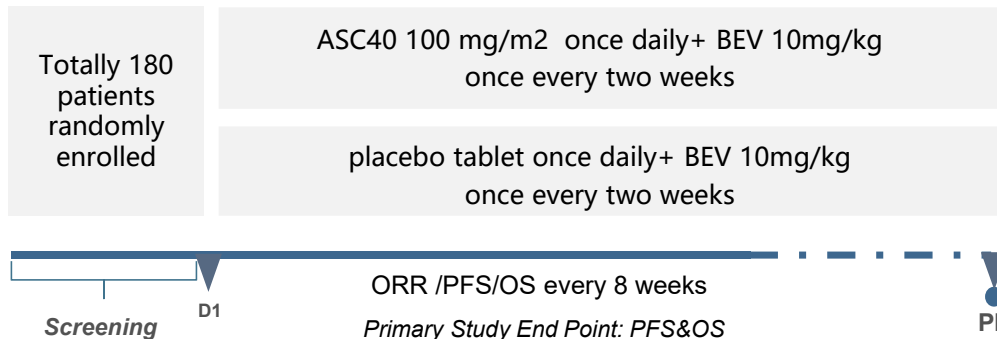
Figure 2. Kaplan-Meier estimate of OS (all patients, N = 25; median = 8.9; 95% CI, 5.2-13.6).

## PFS6 Improvement & Safety

- **PFS6=31.4%**, representing a statistically significant improvement in PFS over the historical Bevacizumab monotherapy PFS of 16% (BELOB Trial) (P=0.008)
- **Safe and tolerated:** ASC40 (TVB-2640) in combination with BEV was safe and well tolerated for the treatment of rGBM pts
- Results have been published on **CLINICAL CANCER RESEARCH**

## Clinical Phase III Trial of ASC40 + BEV to Treat rGBM

### Study Design



China's prestigious brain cancer center--Beijing Tiantan Hospital--leads the study. Other 28 top-tier hospitals participated in clinical research



120 patients enrollment --the basis for pre-planned interim analysis (93 PFS events)-- completed as of Q3,2023



If Phase III interim results shows PFS is significant improved, ASC40 for rGBM may obtain the conditional approval

1. Kelly, William et al. "Phase II Investigation of TVB-2640 (denifanstat) with Bevacizumab in Patients with First Relapse High-Grade Astrocytoma." *Clinical cancer research: an official journal of the American Association for Cancer Research*, CCR-22-2807.



## Summary & Outlook



# R&D Pipeline

Therapeutical Area	Product (Modality)	Target	Indication	Commercial Rights	Pre-IND	IND	Phase I	Phase II	Phase III
Viral Diseases	ASC22 (Subcutaneous mAb)	PD-L1	CHB functional cure	Global <sup>1</sup>	[Progress bar]				
	ASC40 (Oral small molecule)	FASN	NASH	Greater China <sup>2</sup>	[Progress bar]				
NASH	ASC41 (Oral small molecule)	THRβ	NASH	Global	[Progress bar]				
	ASC40 (Oral small molecule) +Bevacizumab	FASN+ VEGF	Recurrent glioblastoma	Greater China <sup>2</sup>	[Progress bar]				
Oncology	ASC61 (Oral small molecule)	PD-L1	Advanced solid tumor	Global	[Progress bar]				
	ASC40 (Oral small molecule)	FASN	ACNE	Greater China <sup>2</sup>	[Progress bar]				

Notes:

1. ASC22 is licensed from Suzhou Alphamab Co.,Ltd. ( "Alphamab" ) for the worldwide exclusive rights.
2. ASC40 is licensed from Sagimet Biosciences Inc. for the exclusive rights in the Greater China.

## Focus on Unmet Medical Needs

China Patients	Therapeutic Area	Current Situation	Highlights	Ascletis Updates
120mm	Acne	<ul style="list-style-type: none"> <li>x Moderate and severe acne patients account for 23-35%</li> <li>x Isotretinoin and antibiotics have many side effects</li> </ul>	<ul style="list-style-type: none"> <li>• Innovative mechanism inhibits sebum secretion</li> <li>• Excellent phase II clinical trial data, good safety profile; oral once daily, convenient for administration</li> </ul>	<ul style="list-style-type: none"> <li>• Phase III trial of ASC40 initiated in Q4, 2023</li> <li>• China's top dermatology clinical center -Huashan Hospital, Fudan University- leads the study</li> </ul>
86mm	HBV	<ul style="list-style-type: none"> <li>x NAs: high relapse rate once off treatment</li> <li>x Interferon: various side effects</li> </ul>	<ul style="list-style-type: none"> <li>• ASC22 is the world's fastest-progressing immunotherapy for the treatment of hepatitis B through PD-1/PD-L1 mechanism</li> </ul>	<ul style="list-style-type: none"> <li>• Interim data of ASC22 IIb expansion cohort: 21.6% pts with baseline HBsAg<math>\leq</math>100 reached HBsAg loss with 24 wk treatment</li> </ul>
48mm	MASH	<ul style="list-style-type: none"> <li>x Large patient population</li> <li>x limited MASH drug approved</li> </ul>	<ul style="list-style-type: none"> <li>• THR-<math>\beta</math>: ASC41 First-in-China/ Third-in-Global</li> <li>• FASN: ASC40 First-in-class in the world</li> </ul>	<ul style="list-style-type: none"> <li>• ASC41: positive interim data of Phase II potentially BIC THR-<math>\beta</math> agonist globally</li> <li>• ASC40: Phase IIb biopsy data met two primary endpoints</li> </ul>
40~60k	GBM	<ul style="list-style-type: none"> <li>x 5-year survival rate is extremely low(5.8%) for GBM</li> <li>x High relapse rate after surgery, limited effective treatments</li> </ul>	<ul style="list-style-type: none"> <li>• Novel lipid metabolism mechanisms for the treatment of solid tumors</li> <li>• Phase II clinical data : PFS6=31.4%</li> </ul>	<ul style="list-style-type: none"> <li>• Over 120 patients enrolled in Phase III (180 totally)</li> <li>• May have enough events for interim analysis of PFS</li> </ul>

# 133+mm HK\$ Buyback\* Significantly Improved Shareholders' Return

## Substantial Buyback to Boost Market Confidence

- Approved 200mm HK\$ for buyback in 2024.7
- 80+mm shares repurchased to date\*
- The largest buyback among 18A biotechs

## Clinical Progress Increases Intrinsic Value

- ASC40-MASH-PhIIb biopsy results: met two primary endpoints
- ASC41-MASH-PhII interim results: potential BIC THRβ
- ASC40-Acne-PhIII: to complete enrollment in Q4

## Listen to and Value Our Investors

- Expand channels to enhance investor understanding
- Timely, sincere, and transparent
- Take opinions and feedback seriously

证券研究报告·港股公司简评 医疗保健

**肝病领域新星，关注 NASH 研发进展**

**事件**

**NASH 药物治疗靶点 THRβ 有重要突破**

公司 12 月 21 日公告，全资子公司甘美制药自主研发的甲状腺素受体 β (THRβ) 激动剂 ASC41 用于治疗肝穿活检证实的 NASH 患者的 52 周 II 期临床试验已顺利推进。

**歌礼制药**

首次评级

贺蔚颖  
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SAC 执证编号  
SFC 中央牌照  
袁清群

ON GOING PUBLIC  
HANG SENG PUBLIC  
NEW LISTED ON NASDAQ

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SGMT Nasdaq:SGMT

歌礼 ascletis | SAGIMET BIOSCIENCES

2023 年 10 月 23 日

光大证券  
ECONOMY SECURITIES

行业研究

掘金百亿美元市场，NASH 赛道扬帆起航  
——NASH 行业深度报告

**要点**

**NASH 治疗蓝海市场即将开启：**非酒精性脂肪肝病(NASH)是一种多因素引起的慢性代谢性疾病，全球患者数量持续增加，NASH 人群大规模步入 II 期、III 期临床试验。由于 NASH 发病机制复杂，临床治疗难度大，全球尚无公认有效的药物能上市。Resmetirom 作为首个达到 FDA 认可治疗 NASH 适应症，在 23 年 4 月正式获批 NASH 适应症，有望打开全球 NASH 治疗市场，以歌礼制药、中国生物制药为代表的中国药企正在积极布局 NASH 赛道，占领国内市场先机。

**多个靶点药物研发进展：**根据以下已有数据推测和药物研发进展，我们认为最有可能成为 NASH 治疗靶点的靶点，主要包括 GIP1r、法尼醇受体 (FXR)1、PPAR 及 THRβ。其中，THRβ 激动剂 Resmetirom (I 期成功) 及 VK-2809 (I 期成功) 通过了 II 期临床，歌礼制药的同类靶点药 ASG4 有望提前临床验证。中国生物制药研发的 PPAR 激动剂 Lanifibranor 在国内进展顺利，已推进至临床 3 期。此外，GIP1r 激动剂 TGF21 类似物等产品也已公布了成功的临床 2 期数据，有望进一步突破临床。未来对 NASH 患者进行精准治疗，我们认为值得 NASH 治疗“双引擎”多个靶点联合用药进行治疗，出现多个重磅大单品。

**医药生物 增持 (维持)**

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行业分析师 300 薪酬对比图

Goldman Sachs | 高盛

30 January 2024 | 4:30PM HKT

Acletis Pharma Inc. (1672.HK): Robust PoC data of ASC40 in NASH; upgrade from Sell to Neutral

We upgrade Acletis Pharma from Sell to Neutral, to reflect our strengthened view on the NASH franchise led by two drug candidates ASC40-NASH / ASC41-THβ with positive phase 2 results published recently (ASG4, which announced robust proof-of-concept (POC) data that, in our view (see details below), represent solid data for the NASH franchise. We raise the current downside for the company is becoming narrower with 1) the robust POC data in NASH and 2) the solid cash position (Rinob2.5m target to cover through 2027) to support further clinical progress with the company's strategic focus shifted from HCV franchise to the clinical POC of NASH franchise. Meanwhile, we note that further upside may need more meaningful catalysts to trigger: 1) the upcoming phase 3 trials in NASH could take more 2-3 years for biopsy data, and 2) the remaining year of 2024 reserves catalyst for Acletis.







**Positive NASH phase 2 readout of ASC40:** Acletis's partner Sagimet (SGMT, covered by Houssni Iain, PNC) reported 52-week phase 2b study results on ASG4 from FASCIVATE-2 trial in F3/F4 NASH patients where defibrotar (ASG4), FASN inhibitor showed statistically significant improvements relative to placebo across key endpoints, and we highlight:

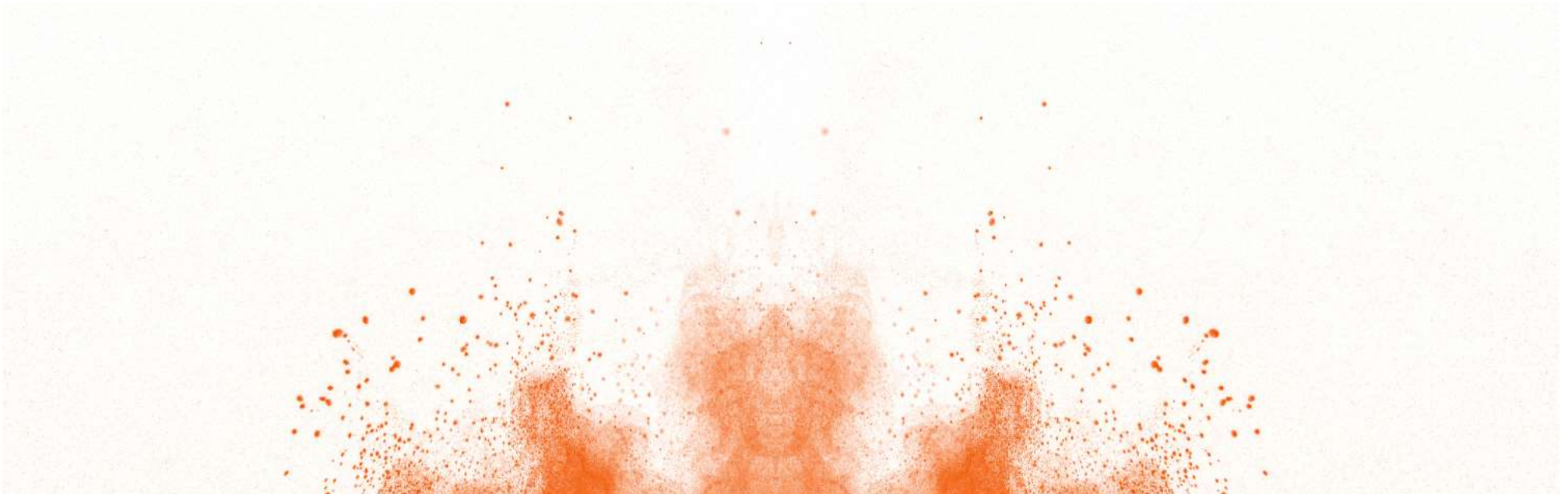
- Significant benefit on two primary endpoints: 1) NAD+ metabolism without worsening of fibrosis with +2 point reduction in NRS (NASH) Activity Score in 38% of ASC40-treated patients vs 12% with placebo (p=0.003) and 2) 30% reduction in NASH without worsening of fibrosis with 52% vs 20% (p=0.0001) were achieved.

歌礼制药 (1672.HK)  
投资者开放日  
2024.1.4 上海 Investor Day

\*2023.6.15-2024.8.30

## Expected Milestones in 2024

Indications	Catalysts	Status
MASH	ASC41(THR-β)MASH—Complete Phase II enrollment	
MASH	ASC40(FASN)MASH-Submit the Phase IIb data from US and initiate discussion with China NMPA for Phase III trial of NASH	
Acne	ASC40(FASN)acne—Complete Phase III enrollment	
rGBM	ASC40(FASN)rGBM--Complete Phase III trial	
Oncology	ASC61(PD-L1)solid tumors—Complete the Phase I multiple ascending dose clinical trial of ASC61 in the U.S	
Metabolic disease	Accelerate in-house drug discovery for global FIC or BIC drug candidates	



# Thanks

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