



Corporate Presentation

Ascletis Pharma Inc.

Augst 2021



Ascletis Overview



Multi-disease platform of both small molecules and biologics



China & US based biotech with experienced management team and ~ 300 FTEs



Significant partnerships:



Healthy cash reserve: US\$405 million as of June 30, 2021;
cash runway into 2025

Ascletis Overview

NASH

- Global leading pipeline of 3 single agents and 3 fixed-dose combinations
- 1 single agent in 52 week biopsy phase IIb

Oncology

- Unique pipeline of cancer lipid metabolism and oral checkpoint inhibitors
- 1 drug in Phase III for recurrent glioblastoma

Viral diseases

- 3 marketed HCV/HBV products in China
- 1 drug in Phase IIb as global leading immunotherapy for functional cure of CHB

Non-alcoholic Steatohepatitis (NASH)

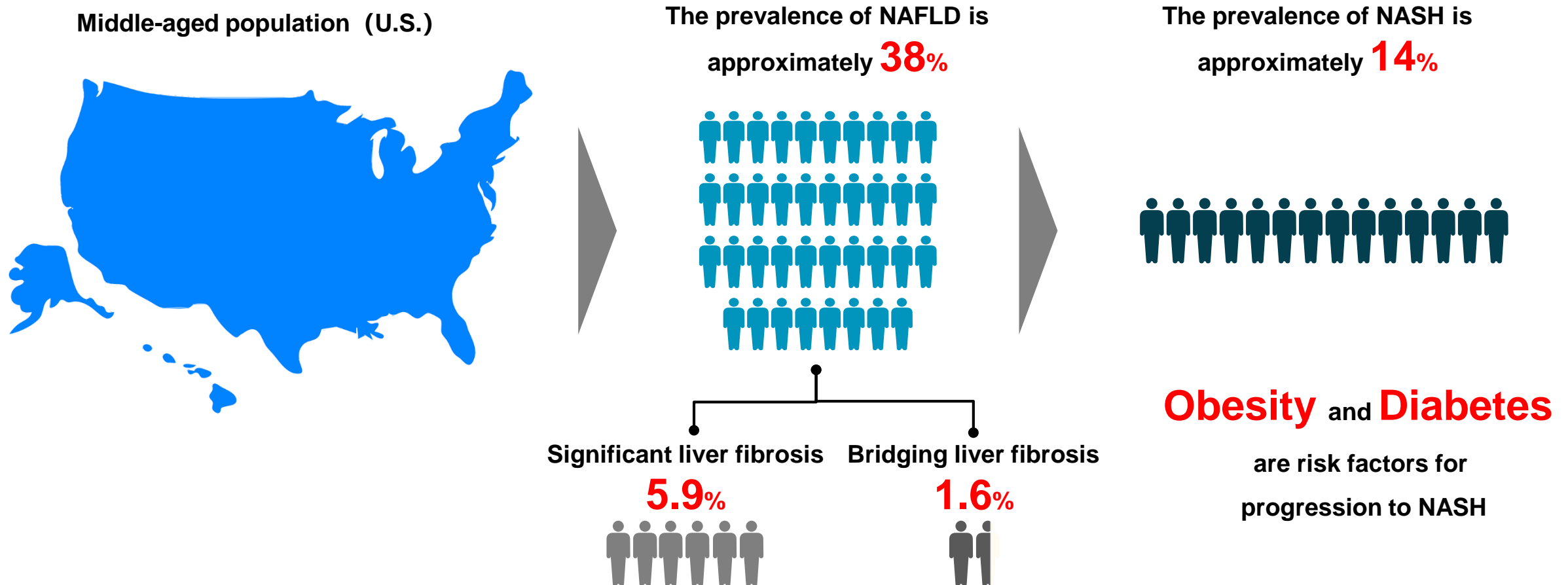
About Gannex



Gannex, a wholly-owned company of Ascletis, is dedicated to the R&D and commercialization of new drugs in the field of NASH. Gannex has three clinical stage drug candidates against three different targets – FASN, THR β and FXR, and three fixed-dose combinations.

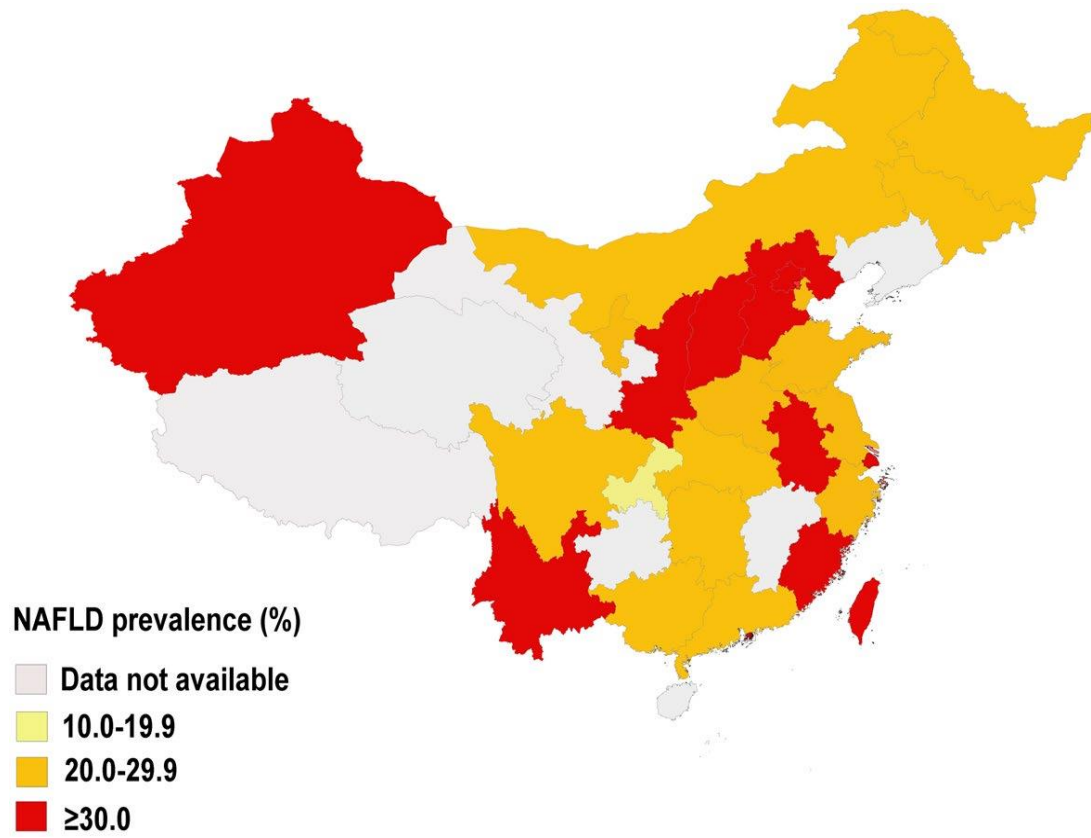
NAFLD and NASH Represent a Large and Growing Health Problem

- A large prospective study evaluated the prevalence and severity of NAFLD/NASH in an asymptomatic middle-aged population attending outpatient colonoscopy in the United States.



NAFLD and NASH Represent a Large and Growing Health Problem

- A large meta-analysis revealed that the prevalence of NAFLD in China was as high as **29.2%** from various perspectives.



NAFLD prevalence statistics in China

Highest NAFLD prevalence age group

- Age 50~59 (**32.9%**; 95% CI, 30.3-35.5)

Prevalence of NAFLD in people with obesity

- **51.6%**, 5 times higher than non-obese population (10.8%)

The prevalence of NAFLD in China is **increasing rapidly**

- 2008 ~ 2010 (25.4%) vs. **2015 ~ 2018 (32.3%)**
- Twice as high as in Western countries, and already exceeds the average prevalence (29.2% vs. 25.2%)

NASH Pipeline: Single Agents and Fixed-Dose Combinations¹

Target	Drug Candidates	Commercial Rights	Pre-IND	IND	Phase I	Phase IIa	Phase IIb/III	Anticipated Key Milestone(s) in next 12 months
FASN	ASC40	Greater China ²	U.S. FDA Fast Track					• US: Interim results from 52-week liver-biopsy Phase IIb study ³
THRβ	ASC41	Global						• US: First patient dosed in 52-week liver-biopsy adaptive Phase IIa/IIb study ³
FXR	ASC42	Global	U.S. FDA Fast Track					• US: Submission for approval of 52-week liver-biopsy adaptive Phase IIa/IIb study ³
THRβ + FXR	ASC43F One-Pill, Once-a-Day FDC	Global						• US: Completion of human PK
FASN + FXR	ASC44F One-Pill, Once-a-Day FDC	Global ²						• Completion of FDC development
FASN + THRβ	ASC45F One-Pill, Once-a-Day FDC	Global ²						• Completion of FDC development

1. NASH pipeline is owned by Gannex Pharma Co., Ltd., an independent biotech which is currently wholly-owned by Ascleitis Pharma Inc.(1672.HK).

2. ASC40 is licensed from Sagimet Biosciences Inc. for the exclusive rights in the Greater China.

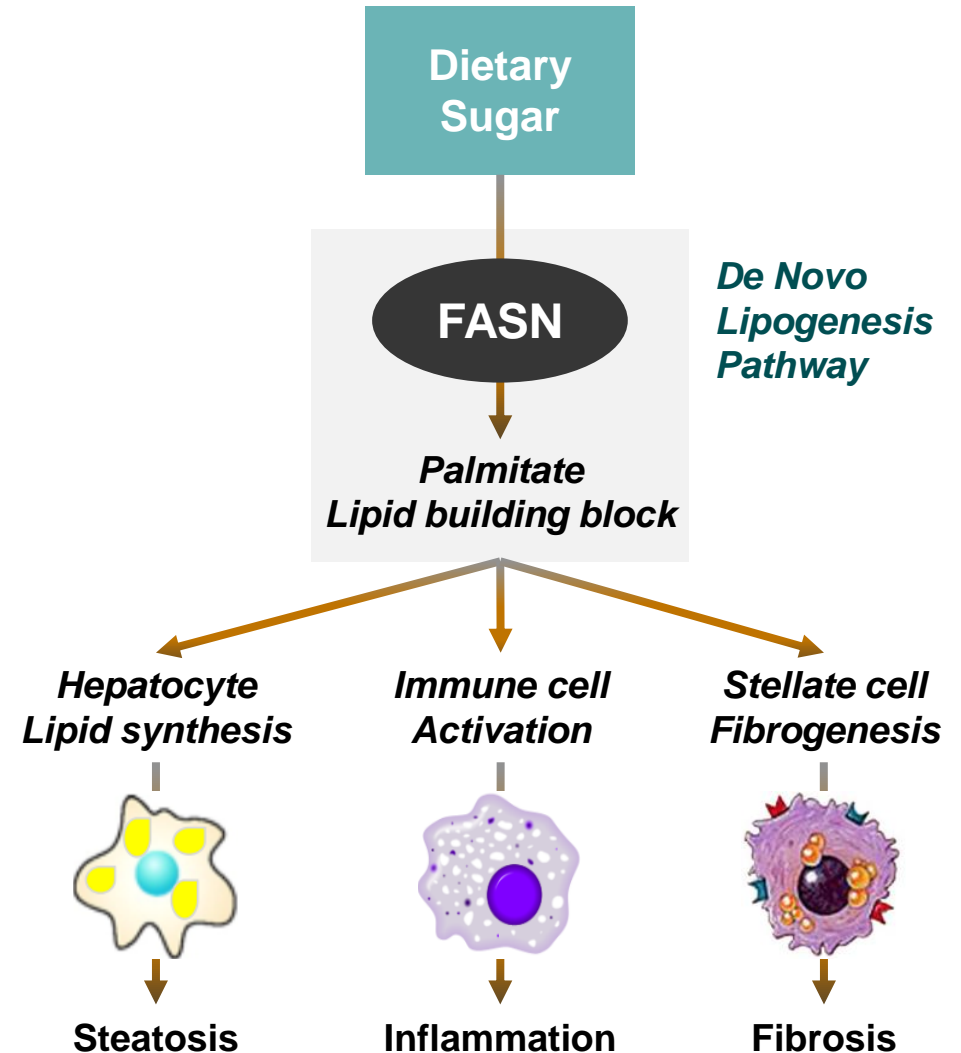
3. The Company plans to initiate global phase III clinical trials in US, China and other countries after the completion of Phase IIb studies of ASC40, ASC41 and ASC42.

Disclaimer: The above milestones are only anticipations and the Company makes no guarantees for the achievement of the milestones.

ASC40: First-in-Class Oral Fatty Acid Synthase (FASN) Inhibitor

FASN is an important rate-limiting step in intrahepatic fatty acid synthesis as well as De novo lipogenesis (DNL)

- Reduces steatosis by blocking DNL
- Reduces inflammation by decreasing cytokine secretion and Th17 differentiation
- Blunts fibrosis by reducing procollagen and profibrotic gene expression



Phase II U.S. Cohort: ASC40 Clinical Trial Design in NASH Patients

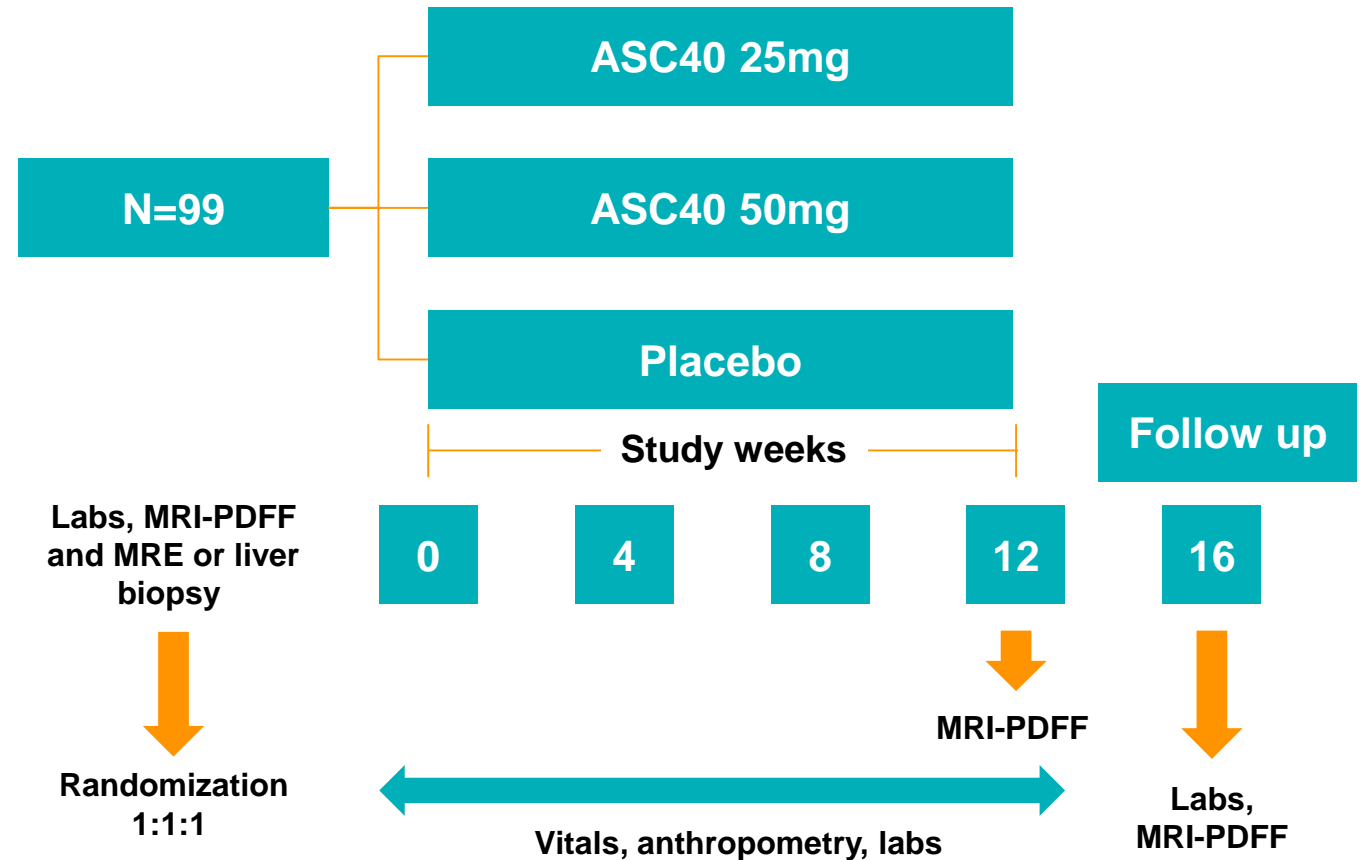
- Multicenter, randomized, placebo-controlled trial 1:1:1 25mg:50mg:placebo (N=99)

Criteria

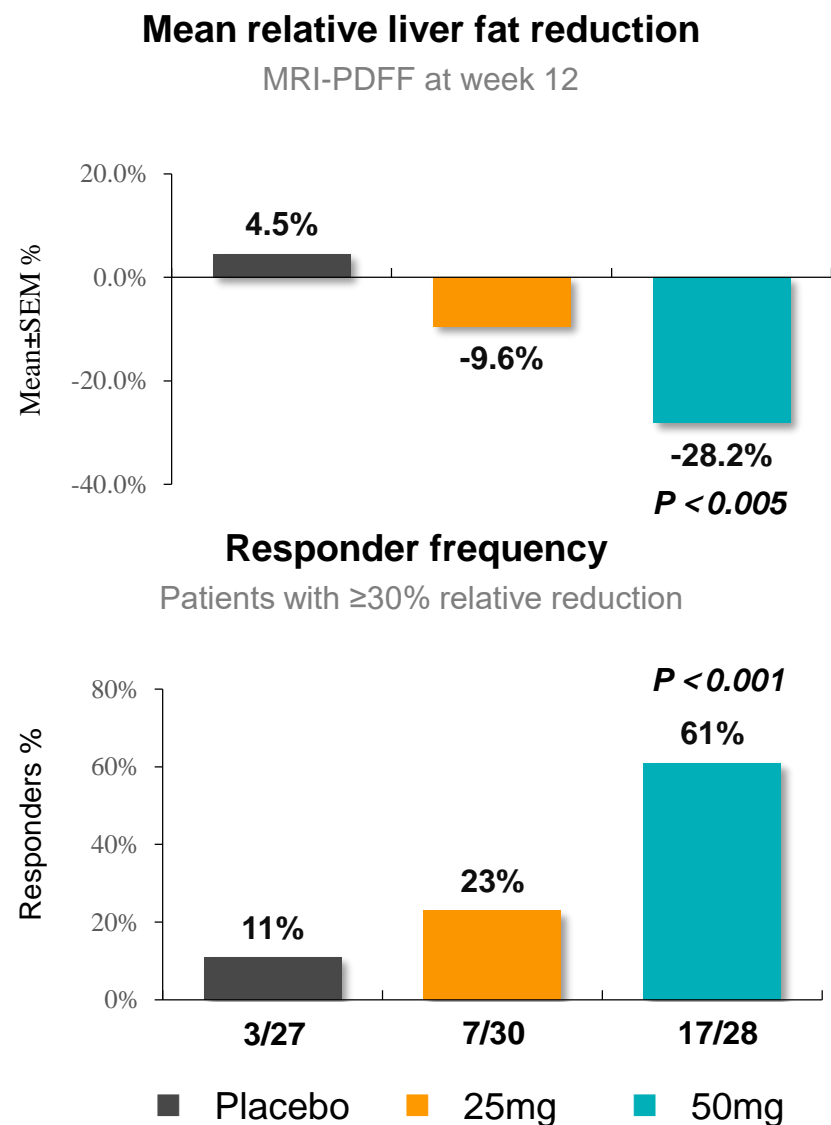
- Inclusion
 - $\geq 8\%$ liver fat
 - MRE $\geq 2.5\text{kPa}$ or recent biopsy
- Exclusion
 - Evidence of cirrhosis
 - Other chronic liver disease

Endpoints

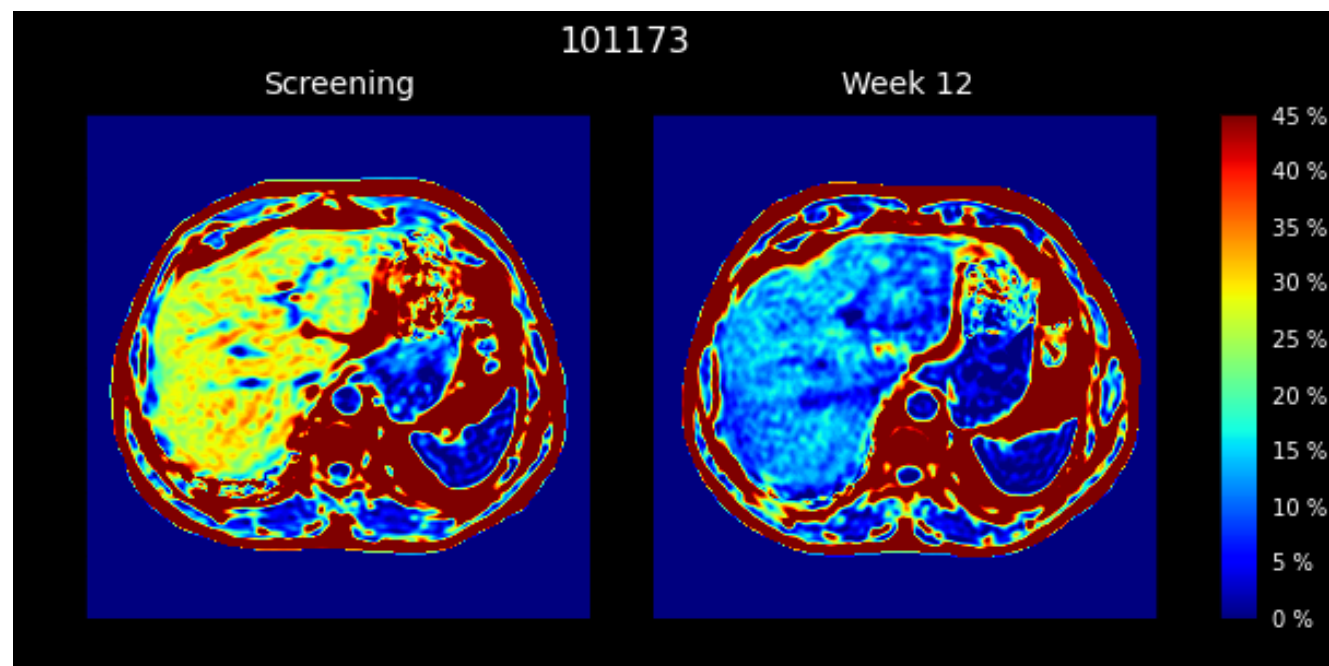
- Primary
 - Liver fat reduction by MRI-PDFF
 - Safety
- Secondary
 - % pts $\geq 30\%$ reduction of liver fat
 - ALT, AST
 - Biomarkers



Phase II U.S. Cohort: ASC40 Significantly Reduces Liver Fat Content



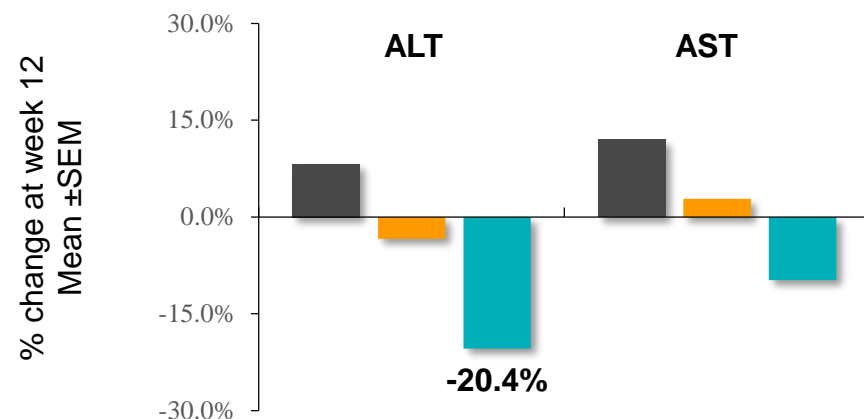
Significant reduction in liver fat content over 12 weeks of treatment



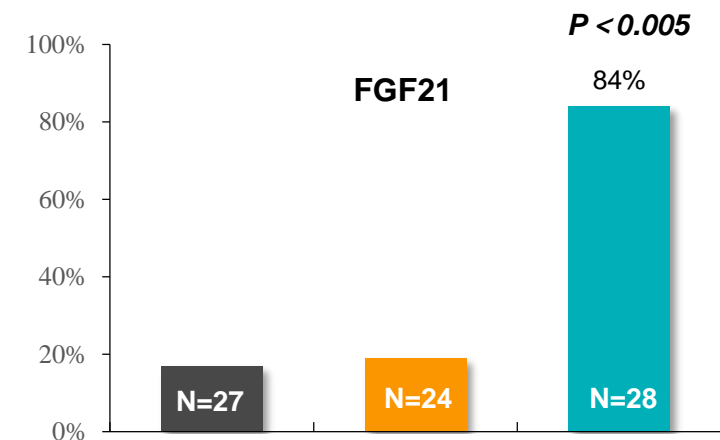
MRI-PDFF responders were defined as those with $\geq 30\%$ MRI-PDFF decline relative to baseline

Phase II U.S. Cohort: ASC40 Significantly Improves NASH-related Metrics

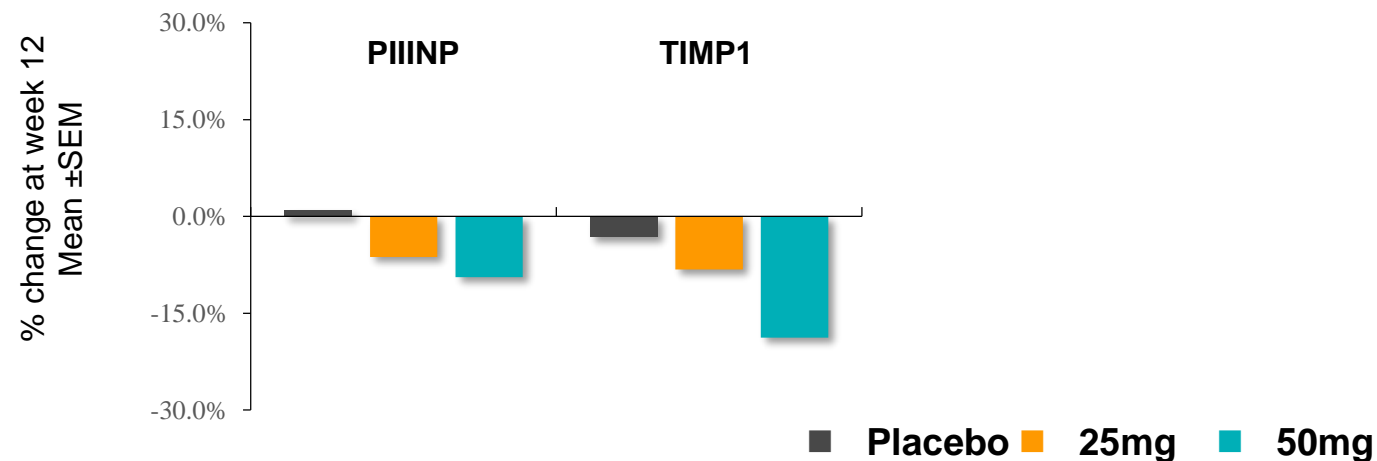
Dose-dependent response in reducing ALT/AST



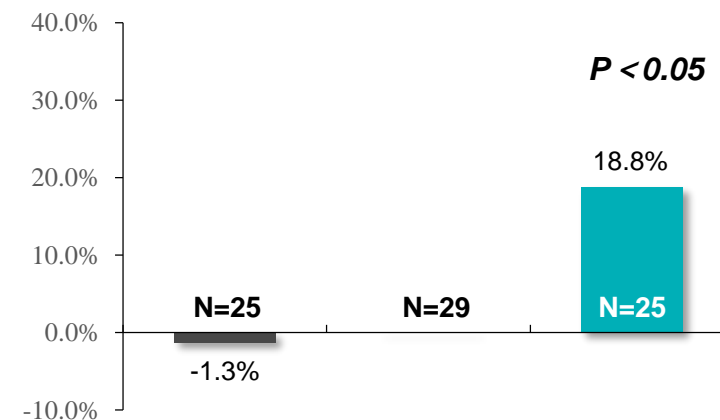
Improves markers of hepatic insulin sensitivity



Decreases fibrosis markers



Adiponectin



Phase II ASC40 Compares Favorably With Other Phase II/III NASH Drugs

Drug Candidate	Company	Target	Dose	Weeks	≥ 30% liver fat reduction responder rate, %		Placebo adjusted ≥ 30% liver fat reduction responder rate, %	Safety
					Drug	Placebo		
ASC40 ¹	Gannex /Sagimet	FASN	50 mg	12	60.7	11.1	49.6	minimal side effects
Firsocostat ²	Gilead	ACC	20mg	12	47.8	15.4	32.4	TG ↑
Tropiflexor ³	Novartis	FXR	200μg	12	64	20	44	LDL-C ↑, pruritus
Resmetirom ⁴	Madrigal	THRβ	80mg	36	74.4	29.4	45	diarrhea, nausea

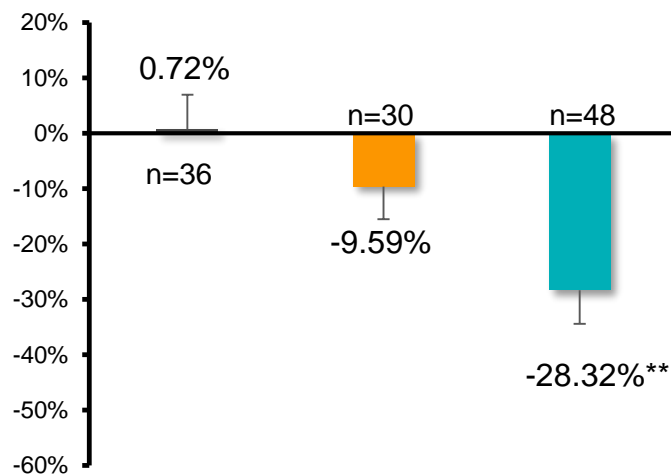
Non-head to head research

- 1、 Rohit Loomba et al. 2020,Hepatology 72;103.EASL 2020 Oral Presentation
 3、 Marcos Pedrosa et al. Contemp Clin Trials. 2020 Jan;88:105889.

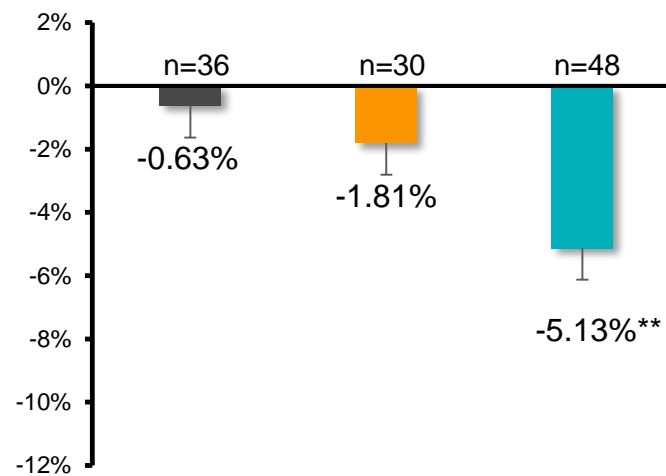
- 2、 Eric J Lawitz et al. Clin Gastroenterol Hepatol. 2018 Dec;16(12):1983-1991
 4、 Stephen A Harrison et al. Lancet. 2019 Nov 30;394(10213):2012-2024

Phase II Combined U.S. & China Cohorts: ASC40 Reduces Liver Fat

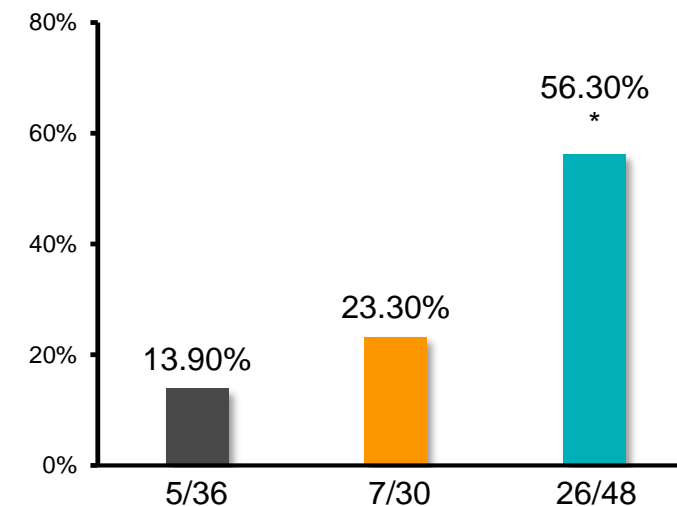
Mean relative liver fat reduction
MRI-PDFF at week 12



Mean absolute liver fat reduction
MRI-PDFF at week 12



Responder frequency
Patient with ≥30% relative reduction



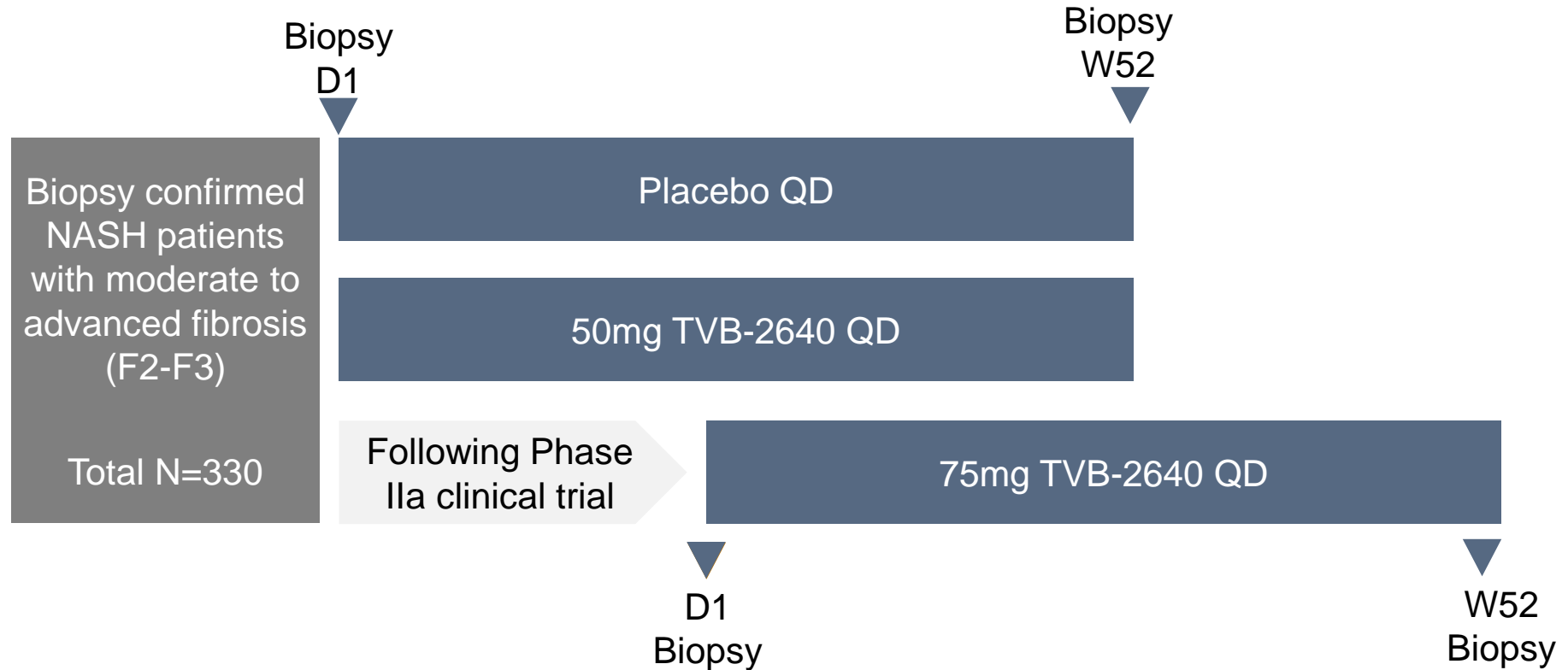
■ Placebo ■ 25mg ■ 50mg

Source: Gannex data

** $p < 0.001$ Mean \pm SEM LSM difference versus placebo for liver fat. Common risk difference for responder frequency

* $p = 0.0002$

ASC40 (TVB2640): US Phase IIb Study Design for NASH

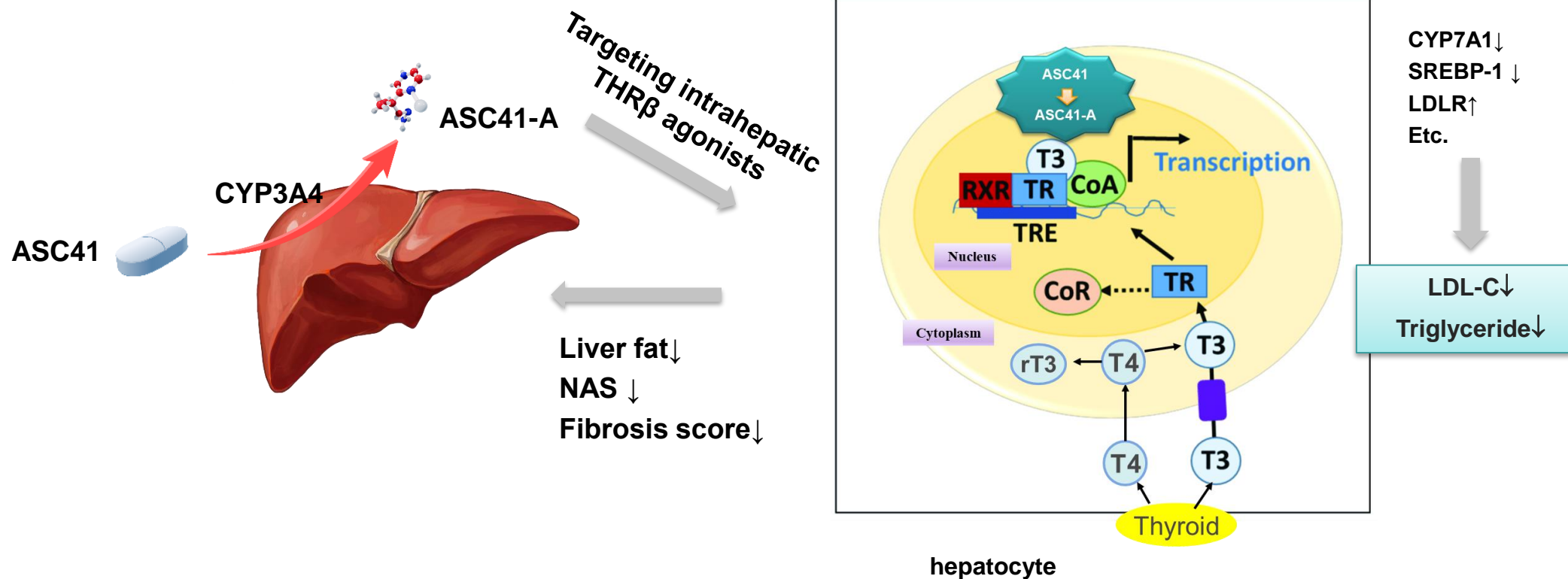


Primary efficacy endpoints:

1. *≥ 2-point improvement in NAS (Nonalcoholic fatty liver disease (NAFLD) Activity Score) that results from reduction of necro-inflammation (inflammation or ballooning), or*
2. *improvement in fibrosis.*

ASC41: A Liver Targeting Thyroid Hormone Receptor Beta (THR β) Agonist

- ASC41 is a liver targeted small molecule which is converted to its active metabolite ASC41-A - a potent and selective THR β agonist



ASC41: Third-in-class THR β Agonist in USA

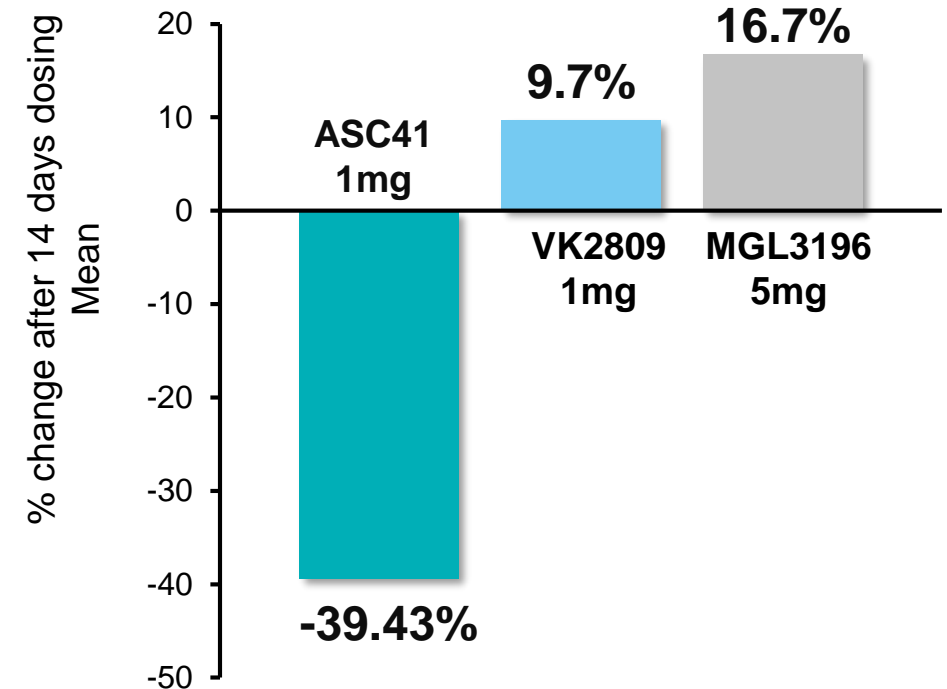
First-in-class THR β Agonist in China

- In two NASH animal models, at 1/10th dose of MGL-3196, ASC41 demonstrated the same improvement in liver steatosis, inflammation and fibrosis.
- Commercially ready oral tablet formulation developed with in-house proprietary technology
- 2 Phase I studies completed
 - Single doses (1, 2, 5, 10, 20 mg) and 14 day multiple doses (1, 2, 5 mg) in 65 subjects with elevated LDL-C > 110 mg/dL
 - Food effect in 12 healthy subjects
- U.S. IND approved Feb 2021
- 1 Phase Ib study completed
 - 28 day, 10 mg in 20 overweight and obese subjects with elevated LDL-C > 110 mg/dL
- Based on above studies, doses have been selected for Phase II trials in patients with NASH

THR β Differentiations: Gannex vs Viking and Madrigal

	Gannex ASC41 ¹	Viking VK2809 ²	Madrigal MGL3196 ³
Oral formulation	Tablet, room temp storage, commercially ready	Capsule, refrigerated	Tablet, room temp storage, commercially ready
Dosing frequency	Once a day	Once every two days	Once a day
Human dose needed for > 30% TG reduction	1 mg	2.5 mg	50 mg

**Placebo adjusted triglyceride reduction
from baseline after 14 day dosing**

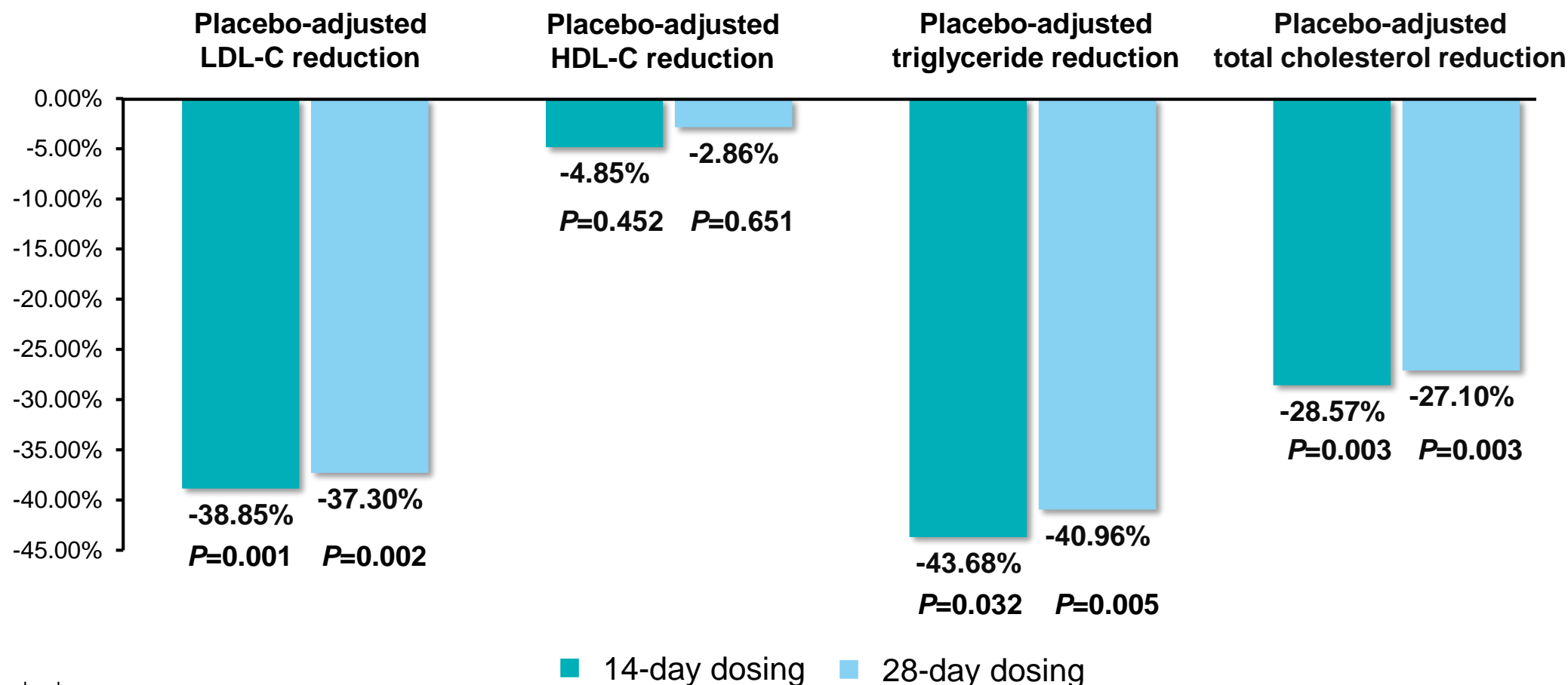


Source: 1.EASL 2021 Abstract No. PO-1851 2.EASL2020 Abstract No. AS073.

3.Stephen A Harrison et al. Resmetirom (MGL-3196) for the treatment of non-alcoholic steatohepatitis: a multicentre, randomised, double-blind, placebo-controlled, phase 2 trial. [www.thelancet.com](https://doi.org/10.1016/S0140-6736(19)32517-6) Published online November 11, 2019 [https://doi.org/10.1016/S0140-6736\(19\)32517-6](https://doi.org/10.1016/S0140-6736(19)32517-6)

Positive Clinical Results in Overweight and Obese Subjects

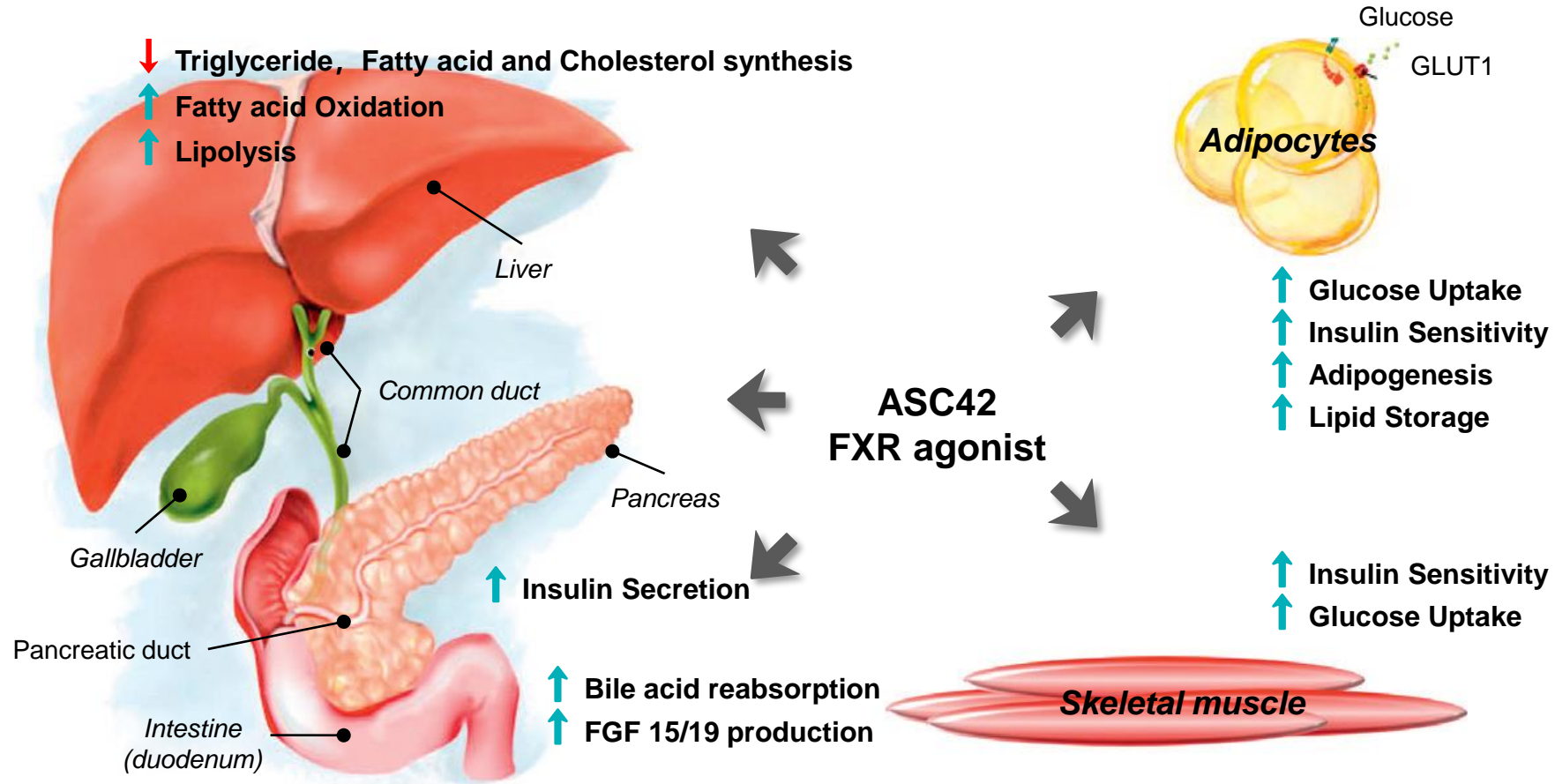
Placebo-adjusted relative change (mean) from baseline after 14 or 28 days of once daily oral dosing of 10 mg ASC41 tablets in overweight and obese subjects



P-value vs placebo

Source: Gannex data

ASC42: A Farnesoid X Receptor (FXR) Agonist



- Increased insulin sensitivity of adipocytes and skeletal muscle cells increases glucose uptake in peripheral tissues and increases energy consumption
- Reduced the synthesis of triglycerides, fatty acids and cholesterol in the liver, promoted liver fat decomposition and fatty acid oxidation

ASC42: A Novel Non-steroidal, Selective, Potent FXR Agonist

- Potentially best-in-class, no pruritus at human therapeutic doses
- U.S. FDA IND approval in Oct 2020
- U.S. FDA Fast Track Designation in Dec 2020
- U.S. Phase I trials completed
 - Single ascending doses and multiple ascending doses
 - Food effect
- Oral tablet formulation developed with in-house proprietary technology and stable at room temperature

ASC42: Topline Results of the U.S. Phase I Trial

- No pruritus observed during 14-day treatment of the once-daily human therapeutic dose of 15 mg.
- FXR target engagement biomarker FGF19 increased 1632% on Day 14 of treatment with 15 mg, once-daily
- FXR target engagement biomarker C4 decreased 93% on Day 14 of treatment with 15 mg, once-daily
- Mean LDL-C values remained within the normal range during 14-day, once daily treatment with 15 mg
- There were no treatment-emergent ALT and AST elevations during 14-day, once daily treatment with 15 mg
- Doses selected for Phase II trial in patients with NASH, which will be initiated by the end of 2021

FDC: Synergies among ASC40, ASC41 and ASC42

Treatment Goals	Monotherapy			FDC One-Pill, Once-a-Day		
	ASC40 FASN	ASC41 THRβ	ASC42 FXR	ASC43F THRβ + FXR	ASC44F FASN + FXR	ASC45F FASN + THRβ
Liver fat reduction	★ ★ ★	★ ★ ★	★ ★	★ ★ ★	★ ★ ★	★ ★ ★
Anti-inflammation	★ ★	★ ★	★ ★	★ ★	★ ★	★ ★
Anti-fibrosis	★ ★	★ ★	★ ★ ★	★ ★ ★	★ ★ ★	★ ★
Lowering LDL-C and TG		★ ★ ★		★ ★ ★		★ ★ ★

Cancer Lipid Metabolism

Cancer Molecular Therapies

Category	Mechanism	Examples of Approved drugs
Signal Transduction	Angiogenesis and proliferation inhibitor	Bevacizumab, Imatinib, Erlotinib, Sorafenib, Ibrutinib, Tofacitinib, Palbociclib
Immunotherapy	Checkpoint inhibitor	Keytruda®, Opdivo®, Tecentriq®, Bavencio®, Imfinz®
Metabolism	Control aberrant energy and substance needs, inhibit toxic metabolites	Ivosidenib, Enasidenib

Cancer Metabolism: Long History, Recent Breakthrough



Warburg Effect (~1921)

Increased glucose uptake and fermentation of glucose to lactate even in the presence of completely functioning mitochondria

RESEARCH 10.1126/science.aaw5473

REVIEW

Science 2020

CANCER

Metabolic reprogramming and cancer progression

BJC 2020
British Journal of Cancer

www.nature.com/bjc



EDITORIAL

Cancer Metabolism

Development of cancer metabolism as a therapeutic target: new pathways, patient studies, stratification and combination therapy

Cancer metabolism has undergone a resurgence in the last decade, 70 years after Warburg described aerobic glycolysis as a feature of cancer cells. A wide range of techniques have elucidated the complexity and heterogeneity in preclinical models and clinical studies. What emerges are the large differences between tissues, tumour types and intratumour heterogeneity. However, synergies with inhibition of metabolic pathways have been found for many drugs and therapeutic approaches, and a critical role of window studies and translational trial design is key to success.

British Journal of Cancer (2020) 122:1–3; <https://doi.org/10.1038/s41416-019-0666-4>



Enasidenib Approved for AML (2017)

FDA approves first-in-class cancer metabolism drug

The FDA approved Agios' and Celgene's enasidenib for acute myeloid leukaemia (AML), validating metabolism-modulating drugs as a means of killing cancer cells.

Enasidenib (formerly AG-221) is a first-in-class inhibitor of mutated isocitrate dehydrogenase 2 (IDH2). The IDH enzymes normally metabolize isocitrate into α -ketoglutarate. When they are mutated in cancers, they also convert α -ketoglutarate into 2-hydroxyglutarate, an oncometabolite that causes cell differentiation defects by impairing histone demethylation.

In clinical trials of enasidenib, 23% of treated patients had complete responses or complete responses with partial haematologic recovery lasting a median of 8.2 months. The most common side effects were nausea, vomiting, diarrhoea, elevated bilirubin and decreased appetite. The agency approved the drug with a black box warning noting the risk of differentiation syndrome, a potentially fatal complication that is associated with certain forms of AML.

Nature Reviews Drug Discovery, 2017, 16, 593

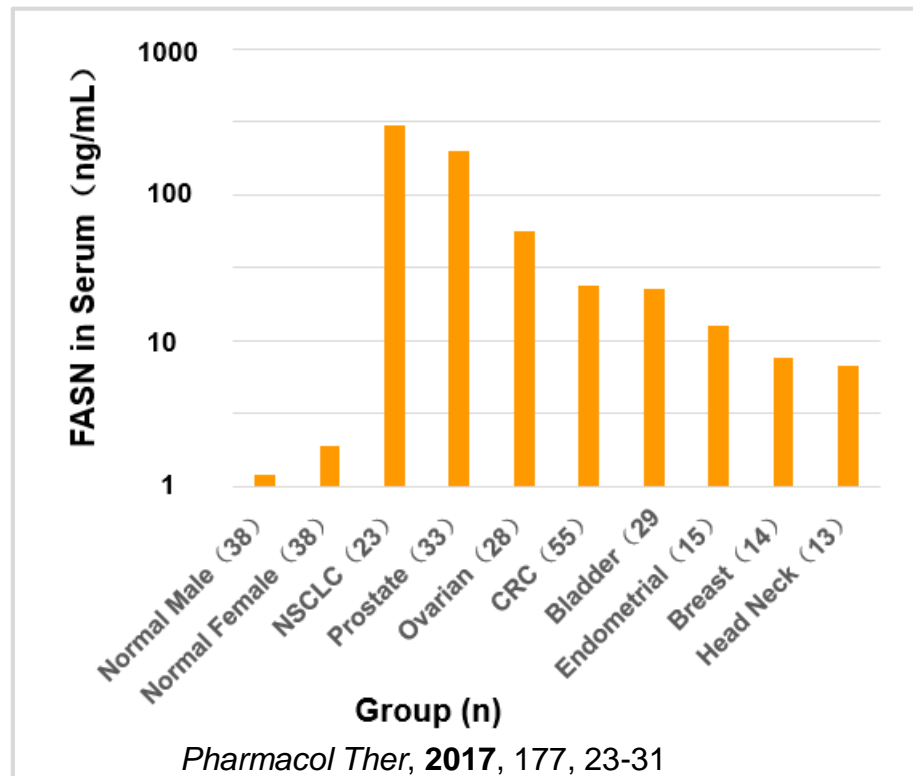
Cancer Metabolism: Approved Drugs and Clinical Stage Candidates

Drug	Target	Indication	Development phase and Company
Ivosidenib (AG-120)	Mutant IDH1 TCA cycle metabolism	AML with IDH1 Mutation	Approved Agiros Pharmaceuticals/Celgene
Enasidenib (AG-221)	Mutant IDH2 TCA cycle metabolism	AML with IDH2 Mutation	Approved Agiros Pharmaceuticals/Celgene
Vorasidenib (AG-881)	Mutant IDH1/2 TCA cycle metabolism	Low grade glioma	Phase III Agiros Pharmaceuticals
Devimistat (CPI-613)	Pyruvate dehydrogenase/α-ketoglutarate dehydrogenase TCA cycle metabolism	Lymphoma, Leukemia, Pancreatic cancer	Phase II / Pivotal Rafael Pharmaceuticals
INCB001158	Arginase inhibitor Maintains arginine levels	Relapsed or Refractory multiple myeloma	Phase II Incyte Corporation
AZD3965	Monocarboxylate transporter 1 Lactate metabolism	Advanced cancer	Phase I Cancer Research UK
ASC40(TVB-2640)	Fatty acid synthase Lipid metabolism	GBM, Breast cancer and other solid tumors	Phase III Ascletis (Greater China)/Sagimet Biosciences (outside Greater China)

Fatty Acid Synthase, A Promising Cancer Drug Target

Fatty Acid Synthase (FASN):

- Synthesis palmitic acid from acetyl-CoA and malonyl-CoA
- Discovered as Oncogenic Antigen 519 (OA-519) in 1990's
- Over expressed in many cancer, prognosis marker



Cell Press
Cell Metabolism
Review

Greasing the Wheels of the Cancer Machine: The Role of Lipid Metabolism in Cancer

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<https://doi.org/10.1016/j.cmet.2019.11.010>

Altered lipid metabolism is among the most prominent metabolic alterations in cancer. Enhanced synthesis or uptake of lipids contributes to rapid cancer cell growth and tumor formation. Lipids are a highly complex group of biomolecules that not only constitute the structural basis of biological membranes but also function as signaling molecules and an energy source. Here, we summarize recent evidence implicating altered lipid metabolism in different aspects of the cancer phenotype and discuss potential strategies by which targeting lipid metabolism could provide a therapeutic window for cancer treatment.

FULL PAPER

BJC

British Journal of Cancer (2018) 118, 43–51 | doi: 10.1038/bjc.2017.374

Keywords: acetyl-CoA carboxylase; cancer; metabolism; membrane characteristics; metastasis; sorafenib A; proliferation; tumour growth

Targeting *de novo* lipogenesis as a novel approach in anti-cancer therapy

Katharina Stoiber^{1,2}, Olga Naglo¹, Carla Pernpeintner^{2,3}, Siwei Zhang¹, Andreas Koeberle⁴, Melanie Ulrich¹, Oliver Werz⁴, Rolf Müller⁵, Stefan Zahler¹, Theobald Lohmüller^{2,3}, Jochen Feldmann^{2,3} and Simone Braig^{*,1}

Glioblastoma

- In China, glioblastoma (GBM) represents 46.1% of gliomas and has an incidence rate of approximately 2.85 to 4.56 per 100,000 population per year, suggesting approximately 40,000 to 64,000 new cases of GBM per year.
- In the United States, GBM represents 56.6% of gliomas and has an incidence rate of approximately 3.21 per 100,000 population per year.
- More than 90% glioblastoma patients will relapse after surgery, radiation and chemotherapies.

Source: 1. 赫捷, 等. 2017 中国肿瘤登记年报. 人民卫生出版社. 2017

2. Ostrom QT, Gittleman H, Truitt G, Boscia A, Kruchko C, BarnholtzSloan JS. CBTRUS statistical report: primary brain and other central nervous system tumors diagnosed in the United States in 2011-2015. Neuro Oncol. 2018;20(suppl 4):iv1-iv86.

3. 《复发性/进展性胶质母细胞瘤的治疗指南》

Cancer Lipid Metabolism: Recent Breakthrough of FASN Inhibitors in rGBM

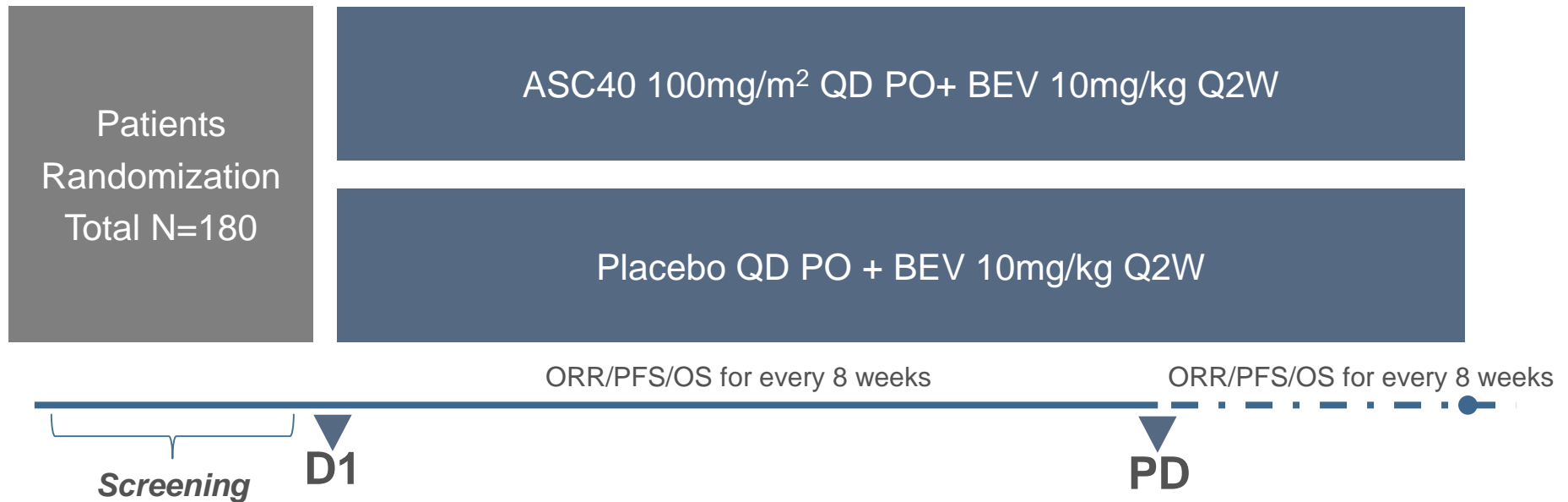
- Investigator sponsored Phase II trial of TVB-2640 with Bevacizumab in patients with first relapse of high-grade astrocytoma (recurrent glioblastoma)
 - 25 patients enrolled
 - All patients received ASC40 (TVB-2640) (100mg/m² PO QD) plus Bevacizumab (10mg/kg IV D1,15) until treatment-related toxicity or progressive disease
- The overall response rate (ORR) for ASC40 (TVB-2640) plus Bevacizumab of 65%
 - Complete response (CR) of 20%
 - Partial response (PR) of 45%
- Progression-free survival at six months (PFS6) for ASC40 (TVB-2640) plus Bevacizumab was 47%
 - Representing a statistically significant improvement in PFS6 over the historical Bevacizumab monotherapy PFS6 of 16% (BELOB Trial) ($P=0.01$)
- ASC40 (TVB-2640) in combination with Bevacizumab was safe and well tolerated in such patient population
- Presented at European Society for Medical Oncology 2020

China NMPA Approved Phase III Clinical Trial of ASC40 Combined with Bevacizumab for Treatment of Patients with Recurrent Glioblastoma

- First Phase III trial of ASC40, a first-in-class drug candidate targeting tumor lipid metabolism
- Bevacizumab is the only drug which has been approved for rGMB indication in China as of September, 2020.
- The data of BELOB Trial indicated that median PFS was three months for patients with rGBM after Bevacizumab treatment.

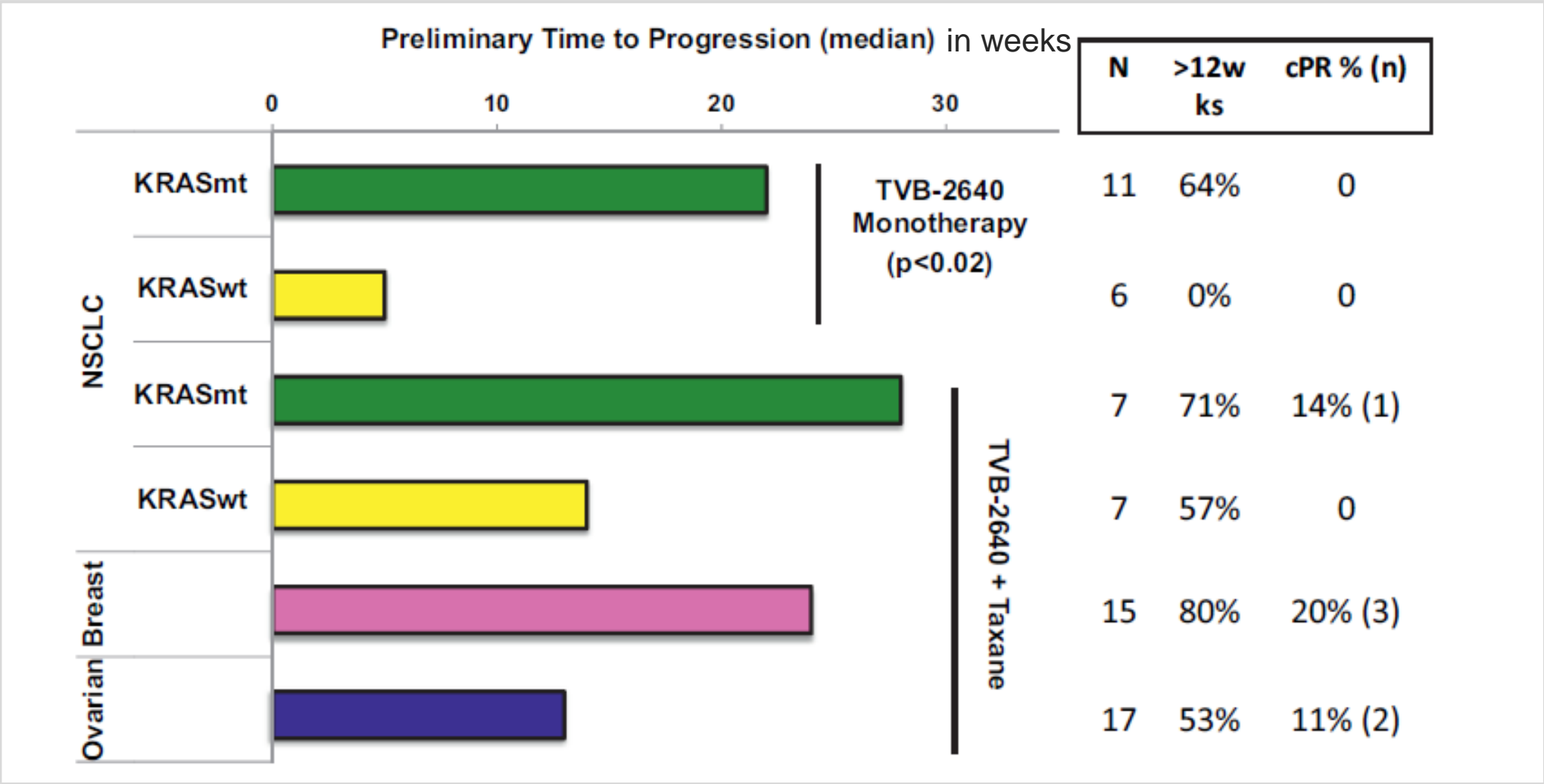
ASC40: China Phase III Study Design for Recurrent Glioblastoma

- A Randomized, Double Blind, Placebo Controlled, Multi-center Phase III Trial of ASC40 in Combination with Bevacizumab for treatment of Patients with Recurrent Glioblastoma



Primary endpoints: PFS and OS

Phase I: Median time to progression of TVB-2640 alone and with a Taxane in patients with KRAS^{MUT} versus KRAS^{WT} non-small cell lung, breast, and ovarian cancer



Other Clinical Trials of ASC40 (TVB-2640)

- Patients with KRAS mutant non-small cell lung cancer (ClinicalTrials.gov Identifier: NCT03808558)
- Patients with breast cancer (ClinicalTrials.gov Identifier: NCT03179904)
- Patients with colon cancer/head and neck cancer (ClinicalTrials.gov Identifier: NCT02980029)

Cancer Lipid Metabolism and Oral Checkpoint Inhibitors

Target	Drug Candidates	Indication	Commercial Rights	Pre-IND	IND	Phase I	POC	Pivotal	Anticipated Key Milestone(s) in next 12 months
FASN+VEGF	ASC40 (Oral) +Bevacizumab	Recurrent Glioblastoma	Greater China ¹	Phase III in China approved					• China: Completion of 80% patient enrollment of Phase III rGMB trial
FASN	ASC40 (Oral)	Multiple Solid Tumors	Greater China ¹						• China: Initiation of Phase II in a solid tumor
FASN	ASC60 (Oral)	Multiple Solid Tumors	Greater China ¹						• China: Initiation of Phase I in solid tumors
PD-L1	ASC61 (Oral small molecule)	Multiple Tumors	Global						• US and China: IND approvals for solid tumors
PD-L1	ASC63 (Oral small molecule)	Multiple Tumors	Global						• Pre-clinical development

1. ASC40 and ASC60 are licensed from Sagimet for the exclusive rights in the Greater China.

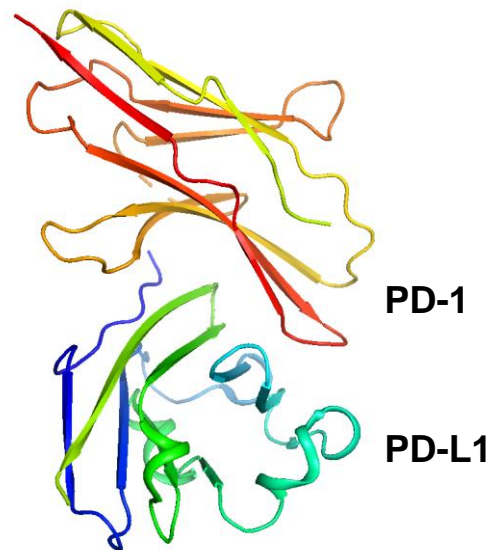
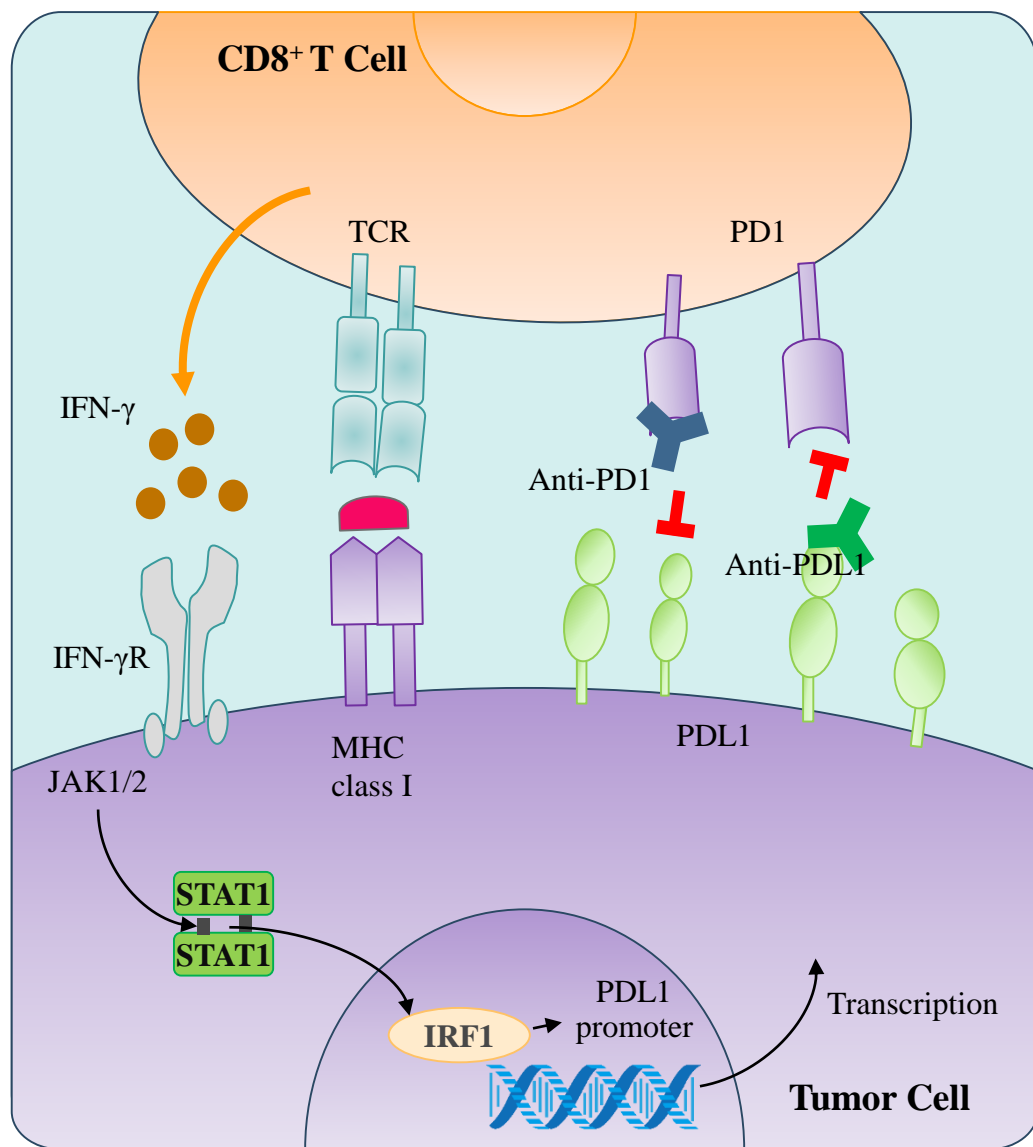
Disclaimer: The above milestones are only anticipations and the Company makes no guarantees for the achievement of the milestones.

Oral Checkpoint Inhibitors

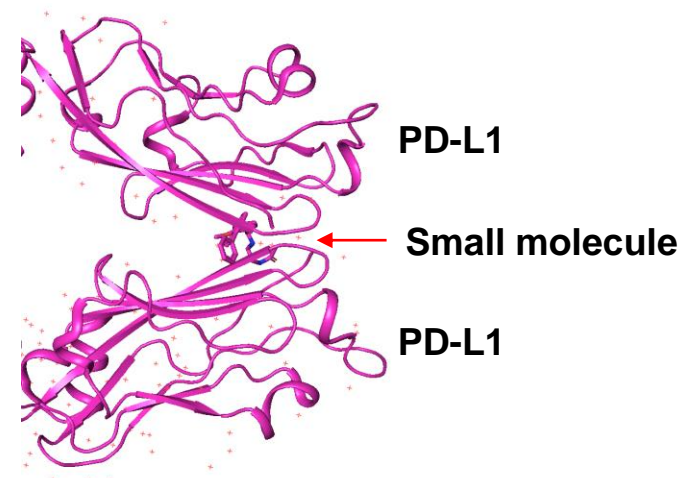
Immunotherapies: Great Success for mAb, It is Time for Oral Drugs

- BMS is the first company working on oral PD-L1 inhibitors
 - Filed patents for oral PD-L1 small molecule inhibitors in 2013
 - BMS stopped working PD-L1 inhibitors later due to drugability issues etc
- Gilead is one of leaders in oral PD-L1 inhibitors
 - A few years ago, Gilead announced its oral PD-L1 inhibitors for HBV
 - At JP Morgan virtual conference in 2021, Gilead announced its oral PD-L1 inhibitor GS-4224 was in Phase I for NSCLC
- Incyte is another leader in oral PD-L1 inhibitors
 - At SITC 2020, Incyte announced its oral PD-L1 inhibitor INCB86550 was in Phase I for solid tumors

PD-L1 Small Molecule Inhibitors: Challenges and Opportunities

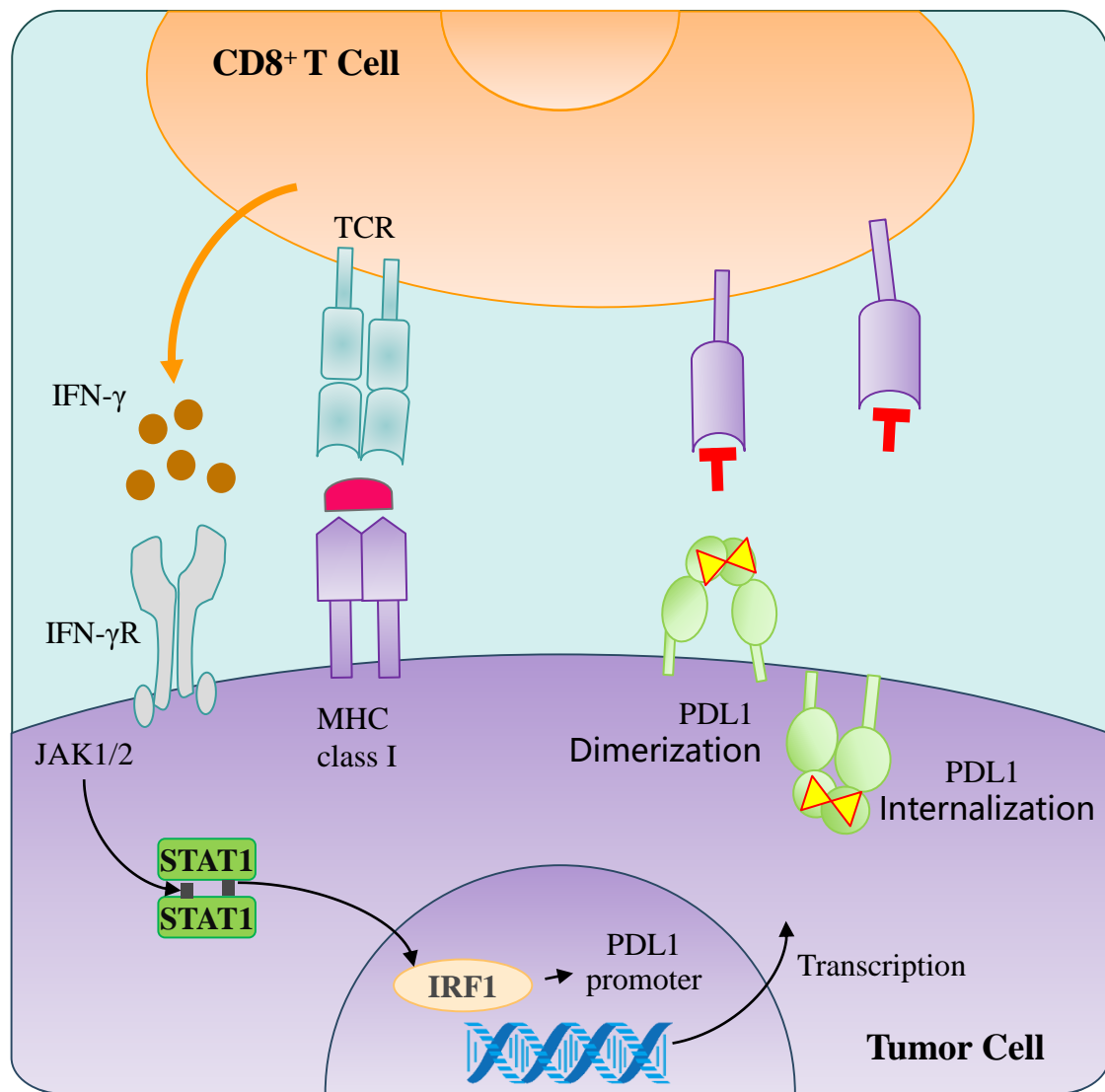


- Antibodies block PD-1/PD-L1 interface
- Traditional small molecules not good at inhibiting protein-protein interaction



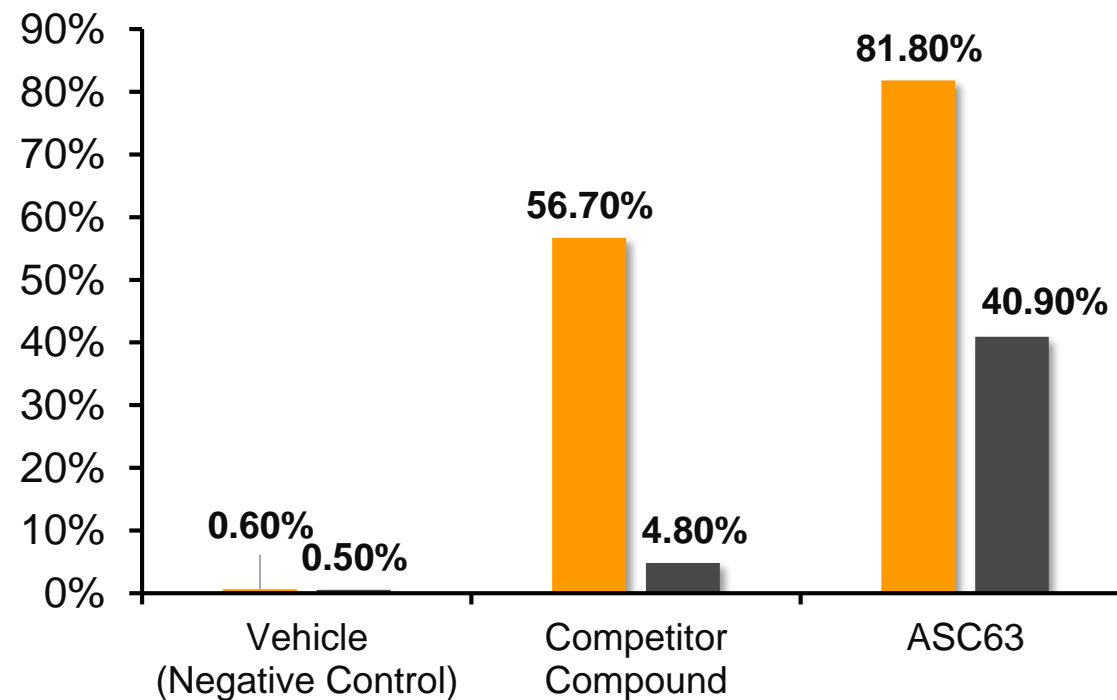
- PD-L1 small molecule inhibitors induce PD-L1 dimerization and internalization, preventing PD-1/PD-L1 interaction

ASC63: Induce PD-L1 Dimerization and Sustained Internalization



Source: Ascletis data

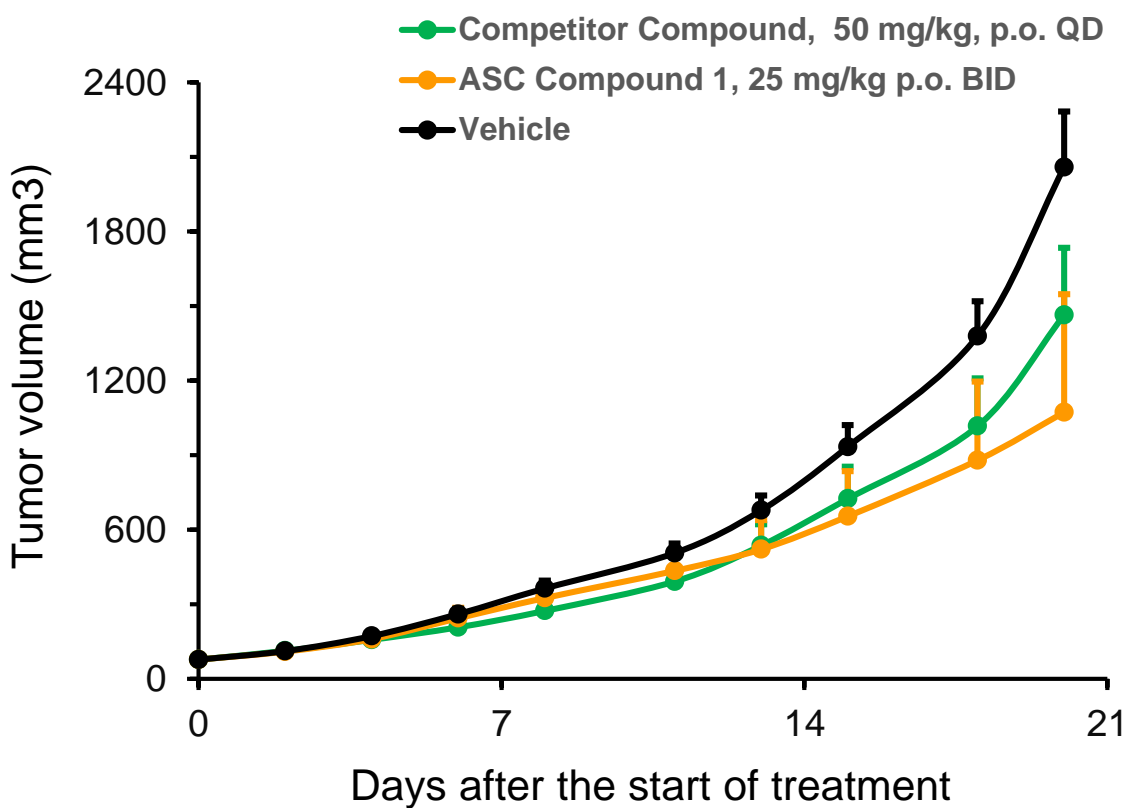
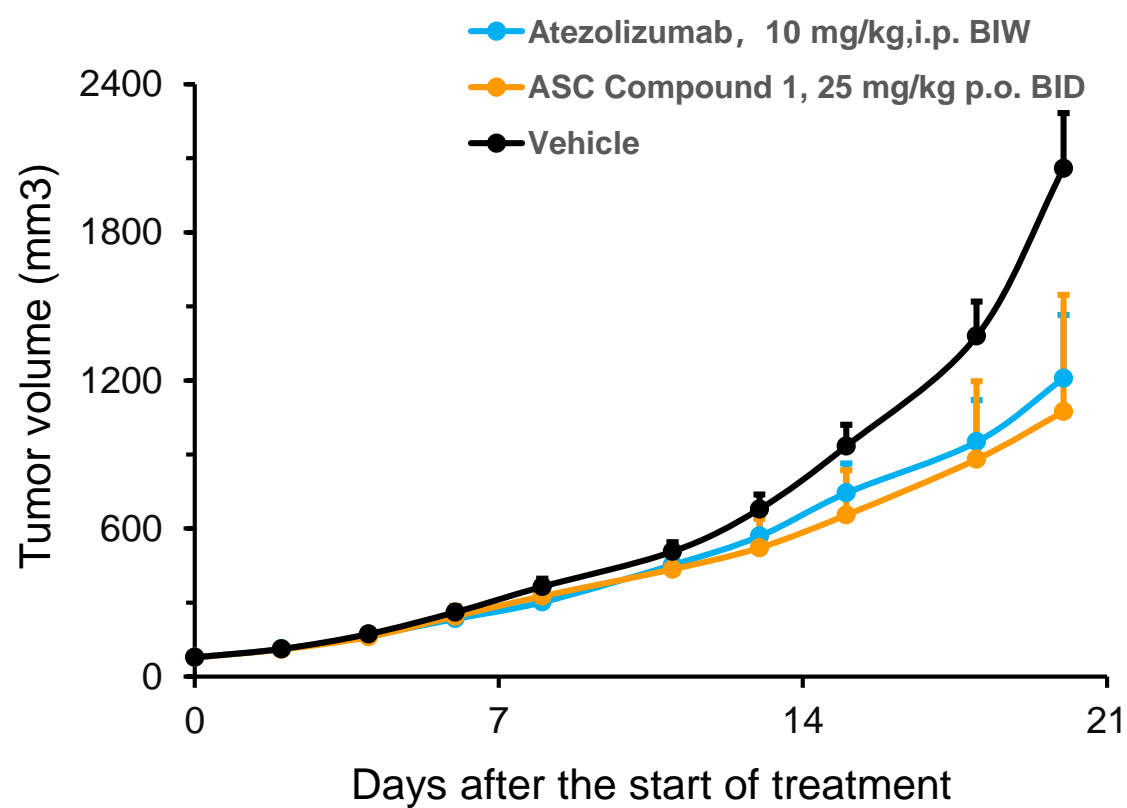
Cell Surface PD-L1 Signal Loss



Ascletis' ASC63

- Potently induce PD-L1 dimerization and internalization (orange)
- Induce long-lasting PD-L1 signal loss from cell surface (after compound removed from medium for 16 hours, still resulted in 40% PD-L1 signal loss) (black)

Ascletis' Oral PD-L1 Inhibitor: Anti-Tumor Activity in Syngeneic Mouse Model



Source: Ascletis data

Viral Diseases

Marketed Products in China



GANOVO®
(Danoprevir)
Indication: HCV



ASCLEVIR®
(Ravidasvir)
Indication: HCV



Pegasys®
(Peginterferon alfa-2a)
Indication: HBV

Notes: 1. Pegasys® is licensed from Shanghai Roche Pharmaceuticals Ltd. for the exclusive rights in the Mainland China.
2. GANOVO® is licensed from Roche (F. Hoffmann-La Roche AG) for the exclusive rights in the Greater China.
3. ASCLEVIR® is licensed from Presidio Pharmaceuticals, Inc. for the exclusive rights in the Greater China.

Viral Diseases

HBV functional cure

Target	Drug Candidates	Commercial Rights	Pre-IND	IND	Phase I	Phase IIa	Phase IIb/III	Anticipated Key Milestone(s) in next 12 months
PD-L1	ASC22	Greater China ¹						• China: Topline results from Phase IIb
FXR	ASC42	Global						• China: Topline results from Phase II
Undisclosed	Candidate identified	Global						• Preclinical development

1. ASC22 is licensed from Suzhou Alphamab Co.,Ltd. ("Alphamab") for the exclusive rights in the Greater China.

Disclaimer: The above milestones are only anticipations and the Company makes no guarantees for the achievement of the milestones.

Viral Diseases

HCV cure

Target	Drug Candidates	Commercial Rights	Pre-IND	IND	Phase I	Phase IIa	Phase IIb/III	Anticipated Key Milestone(s) in next 12 months
Dual Targeted FDC	ASC18	Greater China						• China: Seek partners

HIV immune restoration / functional cure

Target	Drug Candidates	Commercial Rights	Pre-IND	IND	Phase I	Phase IIa	Phase IIb/III	Anticipated Key Milestone(s) in next 12 months
Protease	ASC09F (ASC09 / Ritonavir FDC)	Mainland China and Macau ²						• China: Seek partners
PD-L1	ASC22	Greater China ¹						• China: Initiation of Phase II

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2. ASC09 is licensed from Janssen R&D Ireland for the exclusive rights in Mainland China and Macau.

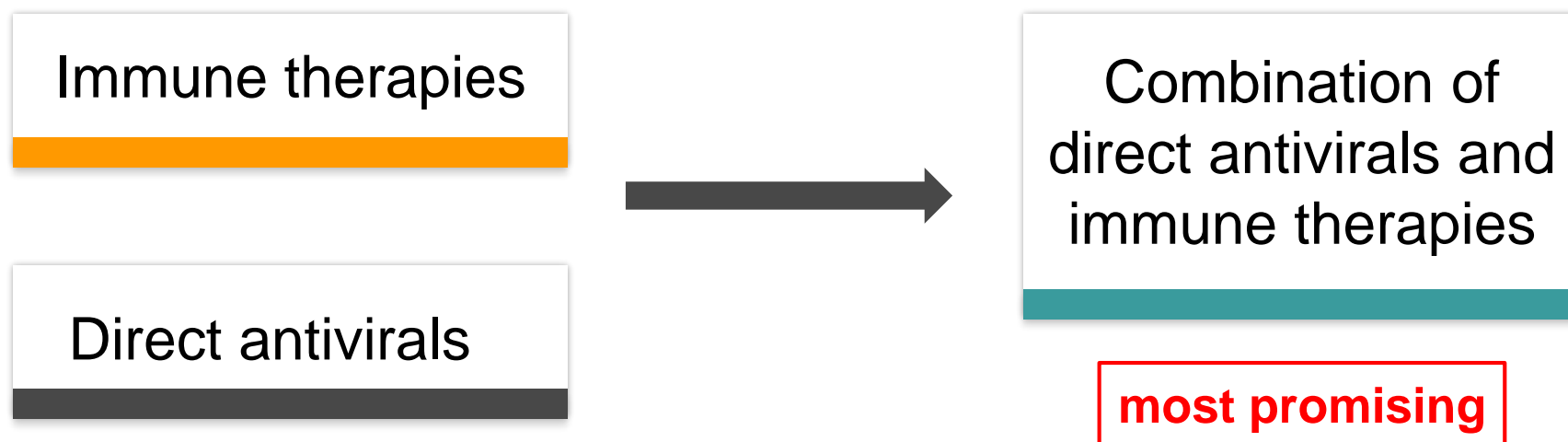
Disclaimer: The above milestones are only anticipations and the Company makes no guarantees for the achievement of the milestones.

HBV Functional Cure

HBV: Partial Cure vs Functional cure

Measure	Partial Cure	Functional cure
Serum HBV DNA	Negative	Negative
Serum HBsAg	Positive	Negative

Therapeutic approaches leading functional cure



Ascleitis: Building HBV Franchise Leading to Functional Cure

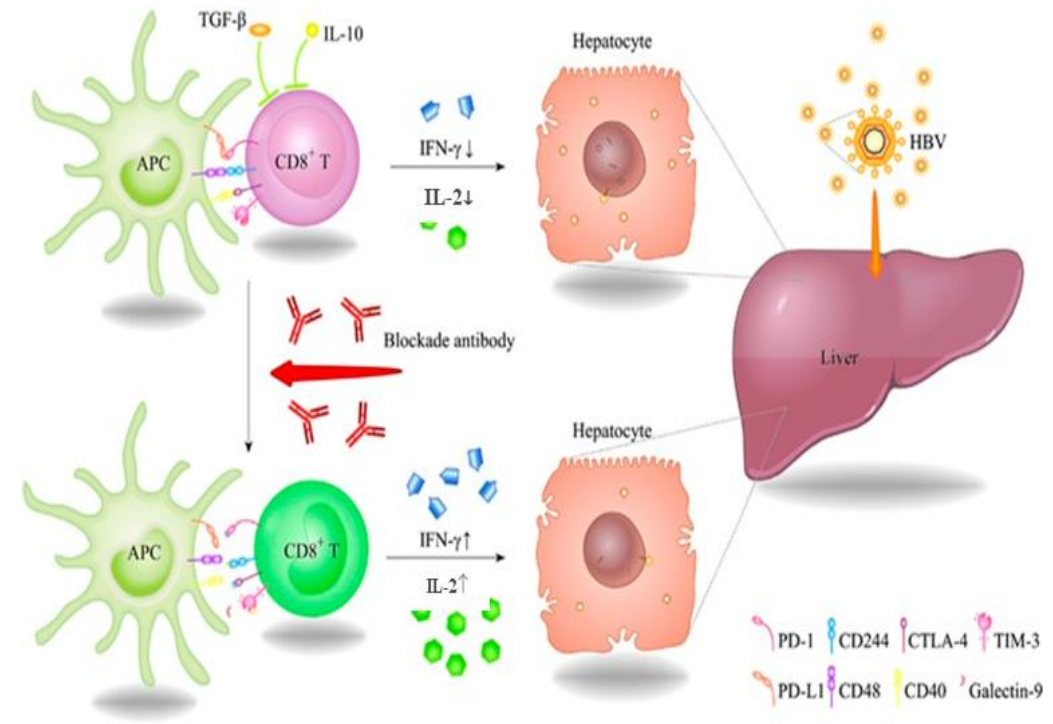
- Cornerstones: Marketed Pegasys® and subcutaneously injected PD-L1 antibody - ASC22
- Pegasys® in combination with in-house developed drug candidates against novel targets such as FXR
- PD-L1 antibody ASC22 in combination with in-house developed drug candidates against novel targets such as FXR
- Pegasys® or PD-L1 antibody ASC22 - Partner with drug candidates of industrial leaders
 - siRNA
 - Core Inhibitors
 - HBV Entry Inhibitors
 - Therapeutic Vaccine

MOA of PD-L1 Antibody Against Chronic Hepatitis B

- ASC22 (KN035) can block the PD-1/PD-L1 pathway to restore T Cell immune function and eliminate HBV.

PD-1/PD-L1 interaction leads to T cell exhaustion
—— **Persistent HBV infection**

Blockade of PD-1/PD-L1 pathway restores T cell
function
—— **Elimination of HBV**



1. Peng G, et al. PD-1 upregulation is associated with HBV-specific T cell dysfunction in chronic hepatitis B patients. Mol Immunol. 2008;45(4):963-70.
2. B Ye, et al. T-cell exhaustion in chronic hepatitis B infection: current knowledge and clinical significance. Cell Death Dis. 2015 Mar 19;6:e1694.

PD-1/PD-L1 Antibodies in Clinical Trials for HBV Functional Cure

■ Ascleitis

- PD-L1 antibody (ASC22 (Envafolimab)), subcutaneous injection
- Phase IIa single dose escalation (0.3, 1.0 and 2.5 mg/kg) completed
- Phase IIb multiple doses (1.0 and 2.5 mg/kg, Q2W for 24 weeks) ongoing

■ Gilead

- PD-1 antibody Opdivo (Nivolumab), i.v. injection in combination with TLR8+siRNA+TAF, Phase II to start

■ Vaccitech

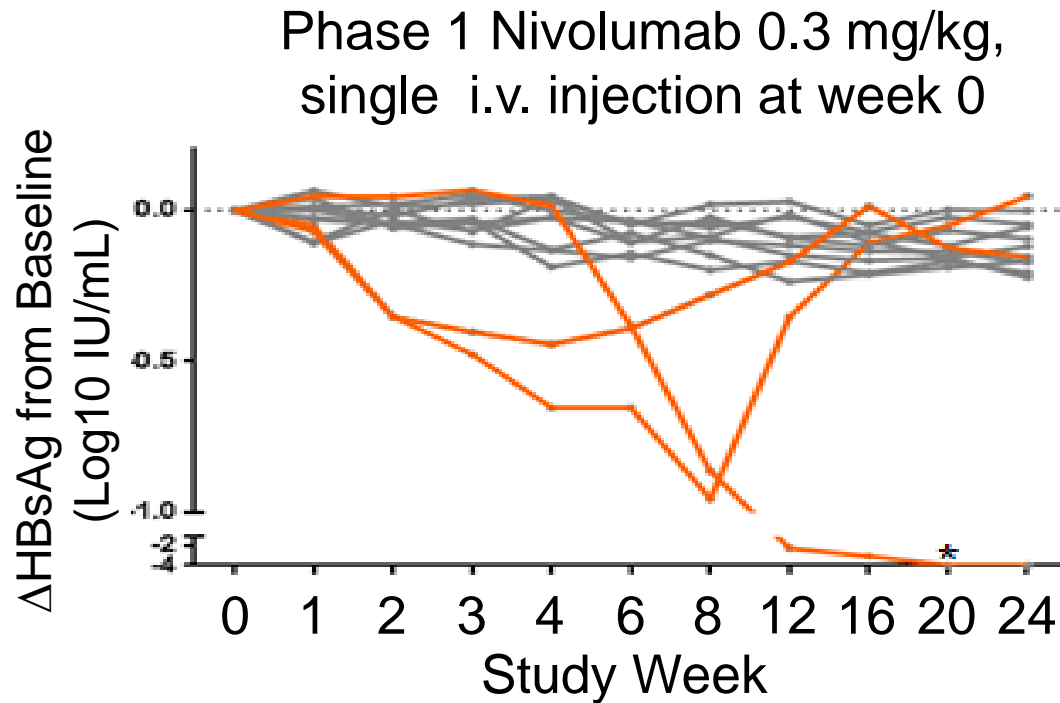
- PD-1 antibody Opdivo (Nivolumab), i.v. injection in combination with therapeutic vaccine(s)

■ Henlix

- PD-1 antibody (HLX10), i.v. injection
- Phase II ongoing, up to 3 doses of HLX10 at 1 mg/kg, Q4W

HBV Functional Cure: PD-1 Antibody - Opdivo (Nivolumab)

- **Nivolumab:** Monoclonal antibody against PD-1 Approved for solid organ tumors and lymphomas



- 1/10 patient Achieved HBsAg loss at week 16 and maintained negative during follow-up
- 1/10 patient experienced 1 log HBsAg decline at week 8 but rebounded afterwards
- 1/10 patient had moderate HBsAg decline

Human Proof of Concept study demonstrated HBsAg loss and its sustainability by single i.v. injection of PD-1 antibody.

Cure for HBV: First-in-class Subcutaneously Injected PD-L1 Ab

- ASC22 (Envafohimab) is a single domain PD-L1 antibody. As an immunotherapy, ASC22 has a potential to lead to a significant breakthrough towards a functional cure for chronic Hepatitis B.

Global First-in-class

Blockade of PD-1/PD-L1 pathway to restore specific T-cell function

Immunotherapy for HBV

Only subcutaneously administered PD-1/PD-L1 antibody with a biologic license application (BLA) submitted for oncology indication



Demonstrated good safety profile

- Phase IIa data showed ASC22 is safe and well tolerated in chronic hepatitis B (CHB) patients and Phase IIb clinical trial has been initiated
- In addition to CHB patients, 1000+ cancer patients exposed in multiple clinical trials in US, China and Japan, Including two pivotal trials in China

Differentiated Profile

- Subcutaneous route of administration
- Good stability at room temperature

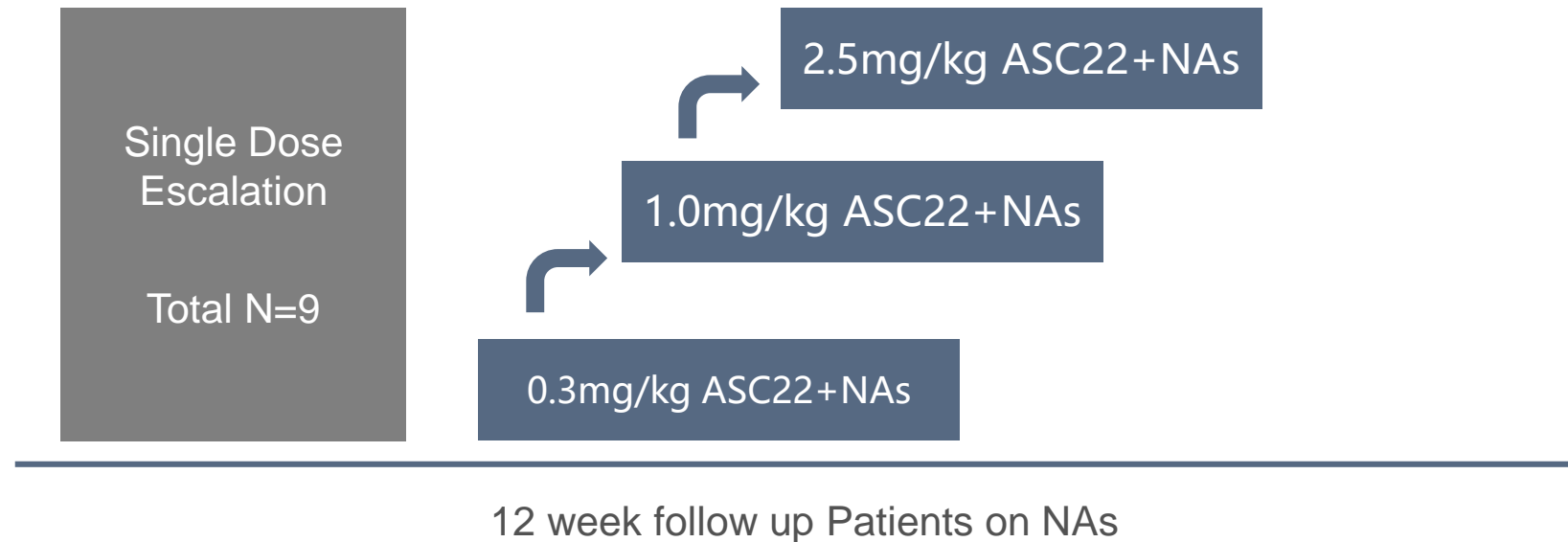
HBV Functional Cure: s.c. PD-L1 Ab ASC22 vs i.v. PD-L1 Abs

Company	Roche	MSD	AstraZeneca	Ascletis
Product	Atezolizumab	Avelumab	Durvalumab	ASC22 (Envafolimab)
Target	PD-L1	PD-L1	PD-L1	PD-L1
Dose	1200 mg/3 weeks	800mg/2 weeks	10mg/kg/2 weeks	1-2.5mg/kg/2 week
Administration	I.V	I.V	I.V	S.C
Indication	Late stage or metastasized Urothelial Carcinoma; Unresectable late stage NSCLC	Adult or Adolescent metastasized Merkel Cell Carcinoma; Late stage or metastasized Urothelial Carcinoma	Late stage or metastasized Urothelial Carcinoma; Unresectable late stage NSCLC	Hepatitis B

1. ASC22 (Envafolimab) has lower dose, with advantage in administration route and storage condition.
2. ASC22 (Envafolimab) is the first PD-1/PD-L1 antibody with subcutaneous injection entering into late phase clinical trial.
3. Phase IIa data showed ASC22 (Envafolimab) is safe and well tolerated in chronic hepatitis B (CHB) patients and Phase IIb clinical trial has been initiated.
4. ASC22 (Envafolimab) has been investigated in several studies conducted in China, USA, and Japan involving greater than 1000 subjects in oncology with proven safety.

ASC22 Phase IIa Chronic Hepatitis B Study Design for Functional Cure

Efficacy and Safety Evaluation



Major inclusion criteria:

HBsAg < 10,000 IU/mL, HBV DNA < 20 IU/mL and negative HBeAg

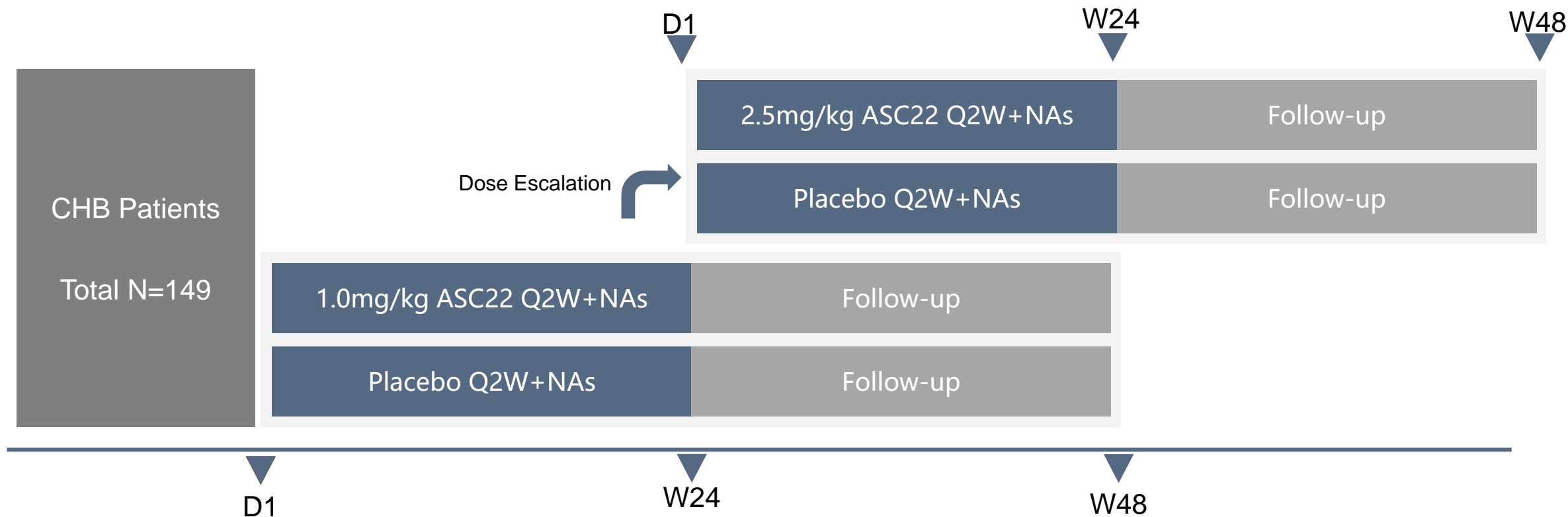
Positive Efficacy Data from ASC22 Phase IIa Single Dose Study

- Trend of dose dependent HBsAg reduction after single dose administration of 0.3, 1.0 or 2.5 mg/kg ASC22 (Envafolimab).
- 8/9 patients treated with ASC22 (Envafolimab) exhibited some decline in HBsAg at the end of 12-week follow-up.
- Among 3 patients receiving 2.5 mg/kg dose, 1 patient achieved a maximum HBsAg reduction of 1.2 log₁₀ IU/mL during the 12-week follow-up.

Good Safety Data from ASC22 Phase IIa Single Dose Study

- ASC22 (Envafolimab) is safe and well tolerated at all three dose levels with only grade 1 adverse effects.
- There were no grade 2 or above adverse effects observed during 12-week follow-up.
- There were no SAE and no discontinuations.
- Single dose administrations up to 2.5 mg/kg ASC22(Envafolimab) did not affect alanine aminotransferase (ALT) and aspartate aminotransferase (AST) levels (all below upper limit of norm) during 12-week follow-up.

ASC22 Phase IIb Chronic Hepatitis B Study Design for Functional Cure



Major inclusion criteria:

HBsAg < 10,000 IU/mL, HBV DNA < 20 IU/mL and negative HBeAg

Positive Interim Results of 149 Patient, Phase IIb Chronic Hepatitis B Study in China for PD-L1 Antibody ASC22 Plus NAs

- HBsAg reduction was observed in the 1 mg/kg ASC22 once every two weeks plus nucleos(t)ide analogs group
 - Greater HBsAg reduction observed in patients with HBsAg \leq 500 IU/mL at baseline
 - No HBsAg reduction was observed for the placebo plus nucleos(t)ide analogs group
- Receptor occupancy after both 1 and 2.5 mg/kg dosing is predicted to be $> 90\%$ over one month, suggesting ASC22 has the potential to be given once monthly
- Patients treated with 1 mg/kg ASC22 plus nucleos(t)ide analogs had a comparable adverse event profile to the placebo plus nucleos(t)ide analogs

I am delighted by the safety data so far for 1 mg/kg ASC22 Q2W plus NAs, which was comparable to that of placebo Q2W plus NAs, once-a-month dosing of PD-L1 antibody ASC22 will dramatically improve compliance and convenience of patients with CHB.

—————Guiqiang Wang, MD
Principal Investigator of the Phase IIb Study, Vice-President of Chinese Society of Physicians for Infectious Diseases and Director of Centre for Liver Diseases at Peking University First Hospital

Safety Data as of July 20, 2021 from 149 Patient, Phase IIb Chronic Hepatitis B Study in China for PD-L1 Antibody ASC22 Plus NAs

■ 1 mg/kg ASC22 Q2W plus NAs

- 37% of patients (22/60) completed 24-week treatment per protocol
- 35% of patients (21/60) completed 14 to 22-week treatment
- 28% of patients (17/60) completed 1 to 12-week treatment

■ 2.5 mg/kg ASC22 Q2W plus NAs

- 7% of patients (4/59) completed 14 to 24-week treatment
- 93% of patients (55/59) completed 1 to 12-week treatment

■ 1 mg/kg ASC22 Q2W plus NAs had a rate of any adverse events of 75%, comparable to that (73%) of the placebo Q2W plus NAs group

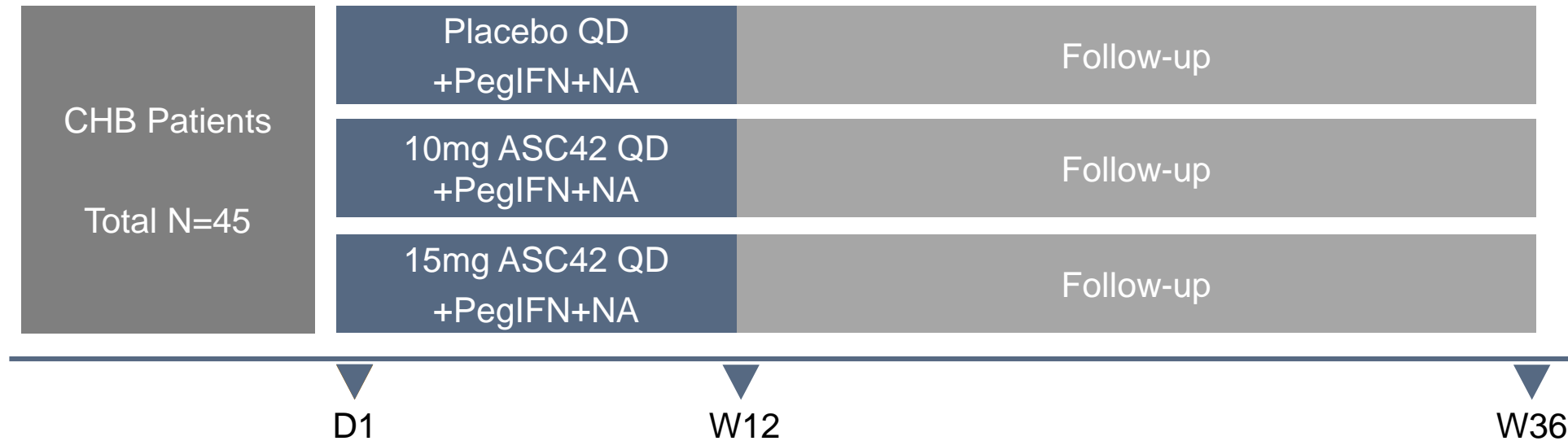
- The rate of grade 3 and 4 adverse events is 7% for both 1 mg/kg ASC22 Q2W plus NAs and placebo Q2W plus NAs

■ 2.5mg/kg ASC22 plus NA was safe and well tolerated

FXR agonist ASC42 has a unique mechanism of action against HBV

- ASC42 inhibits the transcription of HBV cccDNA into HBV RNA, which in turn inhibits the translation of HBV RNA into HBsAg
- ASC42 may also reduce HBV cccDNA stability.
- Both in vitro primary human hepatocyte (PHH) cells and in vivo AAV/HBV mouse studies demonstrated ASC42 significantly inhibited HBsAg and HBV pregenomic RNA (pgRNA)

ASC42: China Phase II Study Design for CHB Functional Cure



Other Disease Areas

Acne

- Eighth most prevalent disease in the world and affects more than 640 million people globally
 - The onset of acne often coincides with pubertal hormonal changes, and the condition affects approximately 85% of adolescents and young adults aged 12 to 25 years.
 - However, acne can also persist into or develop during adulthood.
- A report recently published by Allied Market Research indicated that the global acne medication market size was US\$11.86 billion in 2019, and is projected to reach US\$13.35 billion by 2027.
 - Current first-line treatments for acne include topical creams such as topical retinoids and androgen receptor inhibitor, oral isotretinoin, and antibiotics.

ASC40: A first-in-class drug with novel mechanism of action for Acne

Target	Drug Candidates	Commercial Rights	Pre-IND	IND	Phase I	Phase II	Phase III	Anticipated Key Milestone(s) in next 12 months
FASN	ASC40	Greater China ¹						• China: Topline results from phase II

1. ASC40 is licensed from Sagimet Biosciences Inc. for the exclusive rights in the Greater China.

Disclaimer: The above milestones are only anticipations and the Company makes no guarantees for the achievement of the milestones.

■ Fatty acid synthase (FASN) is a key enzyme which regulates de novo lipogenesis.

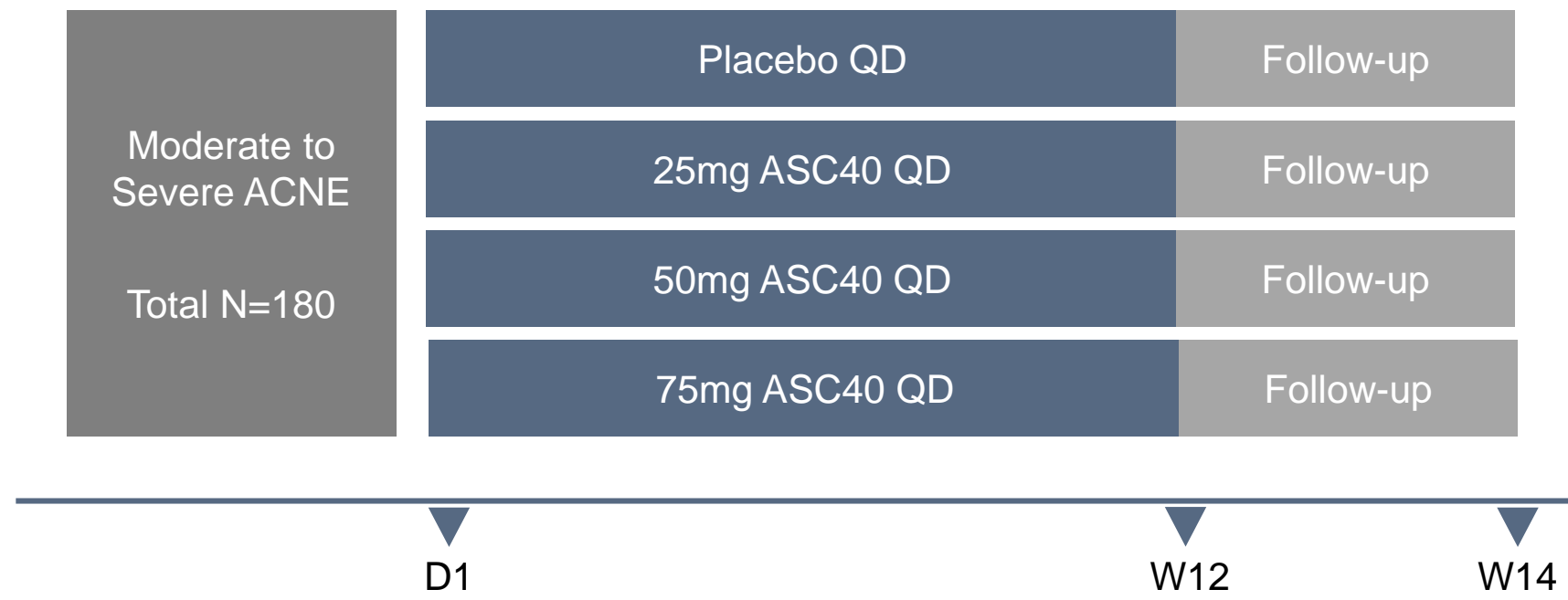
- Human sebum production requires de novo lipogenesis, which is increased in acne and suppressed by the FASN inhibitor ASC40.

■ Clinical proof concept data

- Clinical study indicated that sebum production was inhibited by ASC40 in a dose-dependent fashion

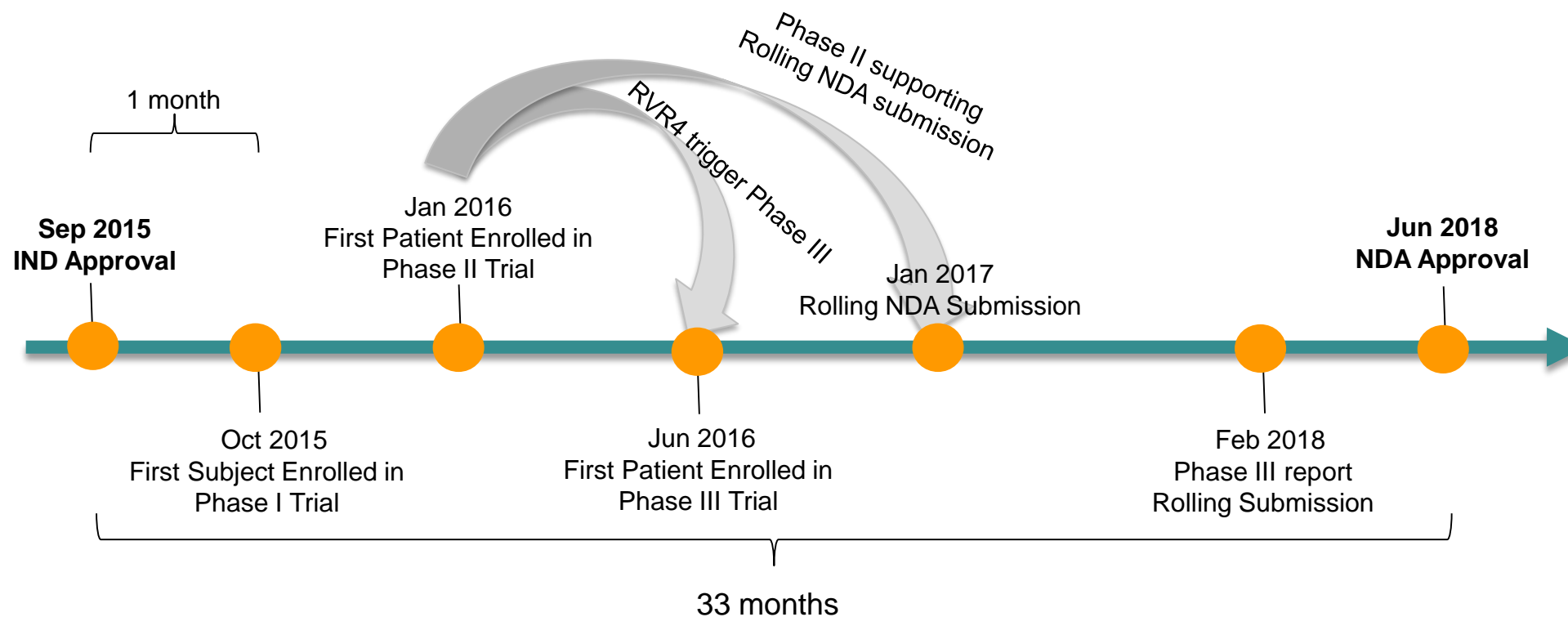


ASC40: China Phase II Study Design for Acne



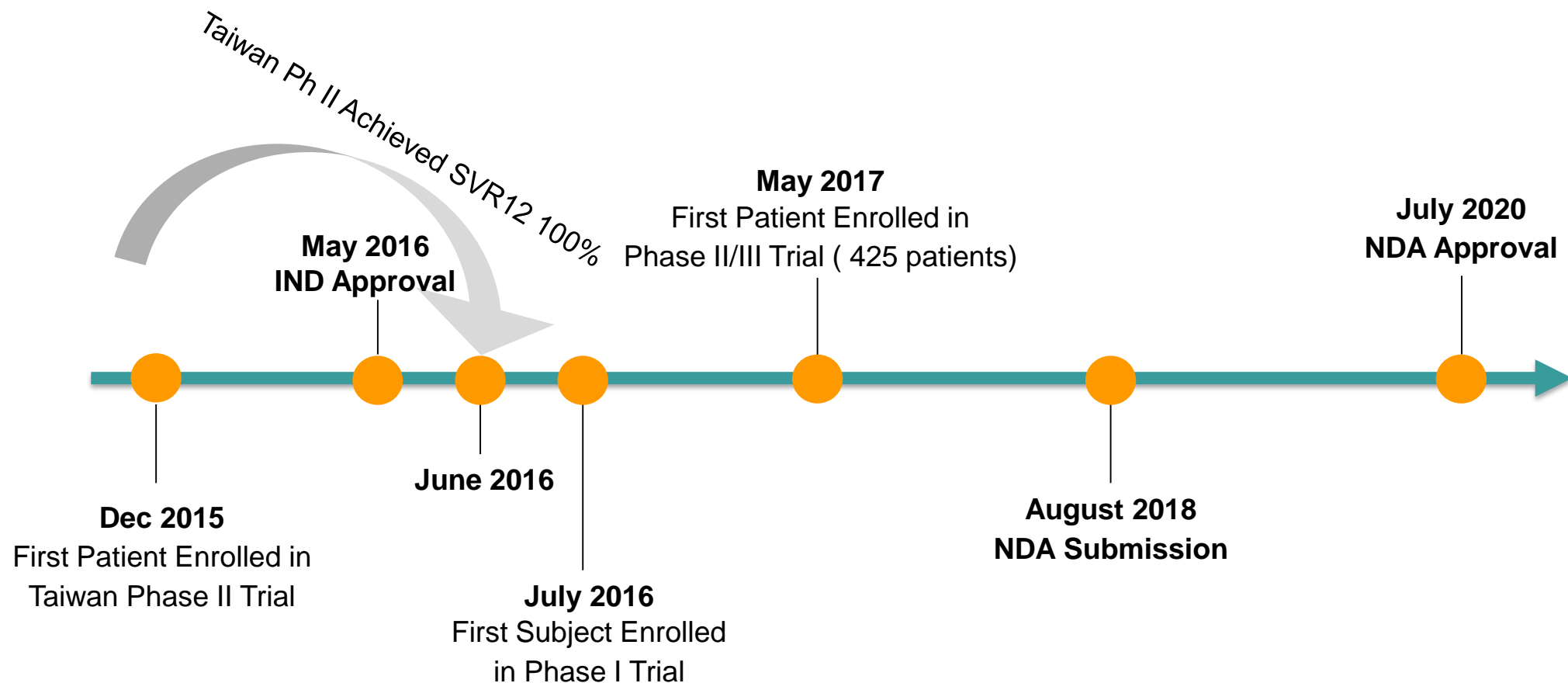
R&D Execution Excellence
GMP Manufacturing Capacity
Commercialization Capability

R&D Efficiency : GANOVO® from IND to NDA Approval: 33 months



Company (Target)	IND Approval	NDA Approval	IND approval to NDA approval (months)
Ascleitis (HCV NS3/4A)	Sept 2015	June 2018	33
BMS (HCV NS3/4A and 5A)	June 2013	June 2017	48

R&D Efficiency: ASCLEVIR[®] from IND to NDA Approval: 50 months



GMP Manufacturing Facilities



GMP Certified

- Quality-by-design approach implemented
- Complied with cGMP

Quality Assurance

- State-of-art equipment with cutting-edge technology capabilities

International Standards







- Experienced manufacturing employees from MNCs


Supply ensured

- Production capacity of 130 million tablets


Experienced and Extensive Sales Network

Experienced Team





5 major units including medical affairs, sales, marketing strategy, market access, and channel / distribution



Directors and above management have 10+ years experience of HCV and HBV at the above representative companies

Network Coverage

- **~1,000** Hospitals located in regions where hepatitis B&C is most prevalent in China
- **~5,400** specialists and key opinion leaders covered in the hepatitis field
- **22** distribution agreements with major distributors, enabling nationwide coverage and timely delivery of products.

Strategy

- Branding Activities and Market Research
- Patients Research and Analysis
- HCV/HBV Awareness Raising

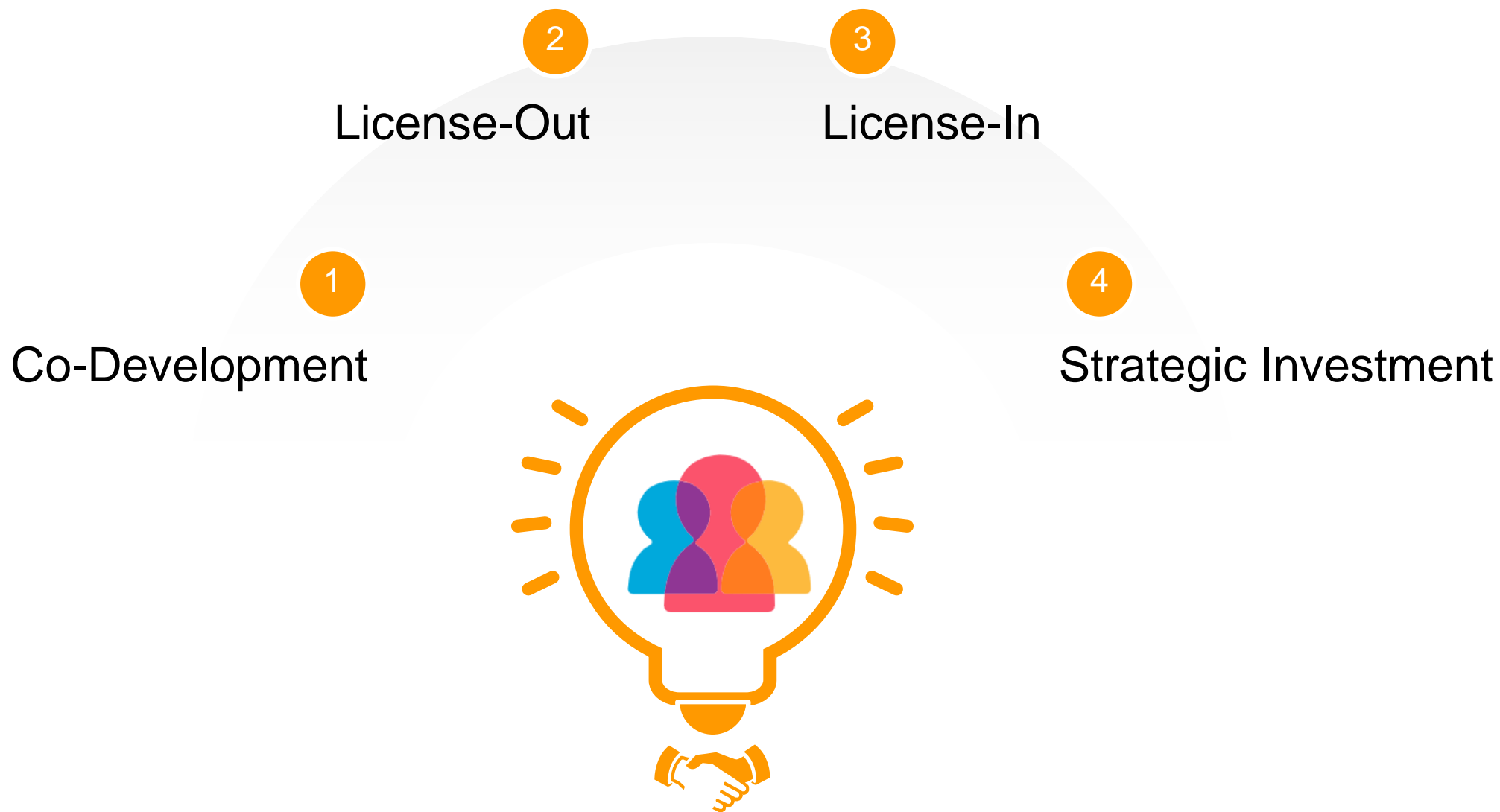


Global Business Development Strategy

Global Partnerships



Global BD Strategy



Co-Development: Areas of Interest

HBV

- ASC22 (subcu PD-L1 antibody) + siRNA
- ASC22 + Capsid inhibitor
- ASC22 + Entry inhibitor

NASH

GLP-1/GLP-1R

- ASC42 (FXR) + subcu weekly GLP-1 / GLP-1R
- ASC40(FASN) + subcu weekly GLP-1 / GLP-1R

SGLT

- ASC42 (FXR) + oral QD SGLT drug
- ASC41 (THR β) + oral QD SGLT drug

Oncology

- GBM: ASC40 (lipid metabolism drug)+bevatizamab
- mBC: ASC40 + other drug
- KRAS mutation: ASC40 + other drug

License-Out: Areas of Interest



NASH

- ASC41 (THR β)
- ASC42 (FXR)



HBV



Oncology

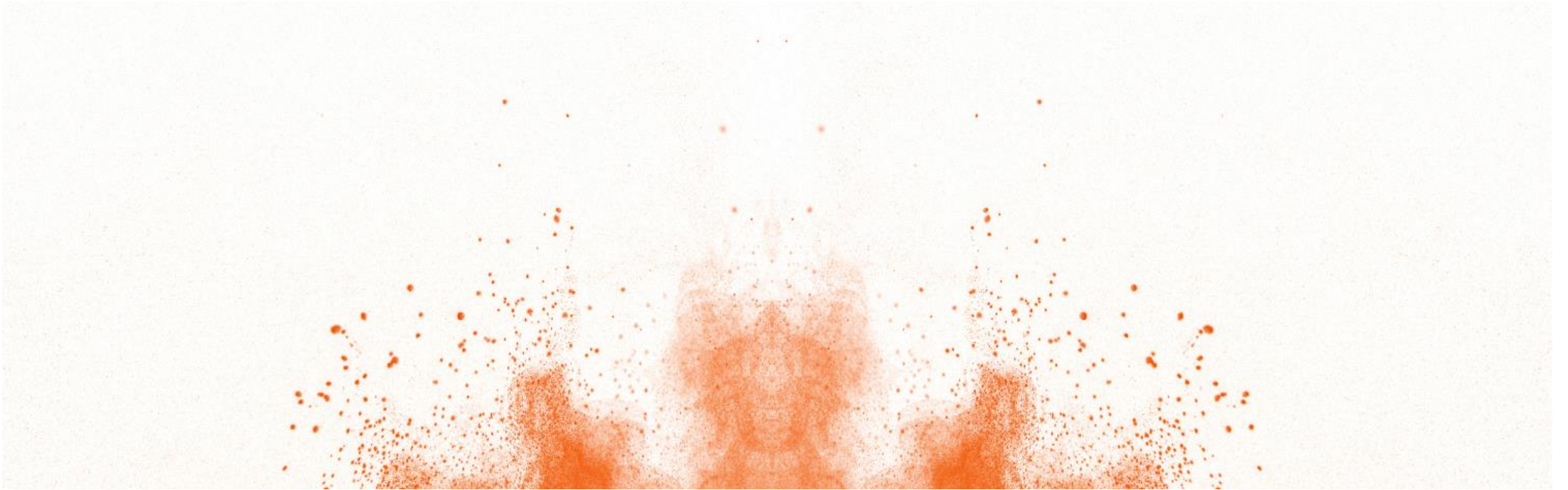
License-In: Areas of Interest



HBV



Oncology



Thanks

Innovative cures liberate life to the fullest



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