



**Novel Biology.
Powerful Medicines.
Transformative Impact.**

NGM Biopharmaceuticals, Inc.

CORPORATE OVERVIEW

FEBRUARY 2020

NASDAQ: NGM



Safe Harbor Statement

This presentation contains forward-looking statements, including, but not limited to, statements regarding potential indications for, and planned development of, product candidates in NGM's pipeline, including aldafermin (NGM282); the planned timing of initiation, enrollment and results of NGM's clinical trials; the potential activity, complementarity, safety, tolerability and efficacy of NGM's product candidates, including aldafermin and specifically including its differentiation and the potential benefits of extended treatment with aldafermin; NGM's option to participate in the economic return of any programs licensed by Merck; NGM's expectation of potential value-driving catalysts and the timing thereof; and any other statements other than statements of historical facts. Because such statements deal with future events and are based on NGM's current plans, objectives, estimates and expectations, they are subject to significant risks and uncertainties and actual results and achievements and the timing of events could differ materially from those described in or implied by the statements herein. Such risks and uncertainties include, without limitation, those associated with the costly and time-consuming pharmaceutical product development process and the uncertainty of clinical success, including risk related to failures or delays in initiating, enrolling or completing clinical trials; the risk that results obtained in NGM's clinical trials to date may not be indicative of results obtained in ongoing or future trials, including the risk that ongoing or future studies show that aldafermin is not a tolerable or effective treatment for NASH patients; seeking and maintaining protection of intellectual property; NGM's reliance on third party manufacturers and delays or problems in the manufacture of product candidates; and other risks and uncertainties affecting NGM and its development programs, including those described under the caption "Risk Factors" and elsewhere in NGM's quarterly report on Form 10-Q for the quarter ended September 30, 2019 and future filings and reports of NGM with the Securities and Exchange Commission. The forward-looking statements contained herein are made only as of the date hereof or as of the dates indicated in the forward-looking statements, even if they are subsequently made available by NGM on its website or otherwise. NGM undertakes no obligation to update or supplement any forward-looking statements after the date hereof, or to update the reasons why actual results may differ or differ materially from those anticipated in the forward-looking statements.

Company Highlights



Aldafermin (NGM282)

Wholly-owned,
Phase 2b product
candidate for
treatment of **NASH**
(non-alcoholic
steatohepatitis)



NGM313 (MK-3655)

Insulin sensitizer
for treatment of
NASH and T2D;
Licensed by Merck



Strategic
collaboration with
Merck –
**up to \$75M/yr. R&D
support¹**
and **NGM option
on future Merck
late-stage programs**



Experienced team
with highly
productive R&D
engine generating
on average
**~1 development
candidate/year**



Multiple **key
milestones** and
potential **value
driving catalysts**
expected in the next
12-18 months

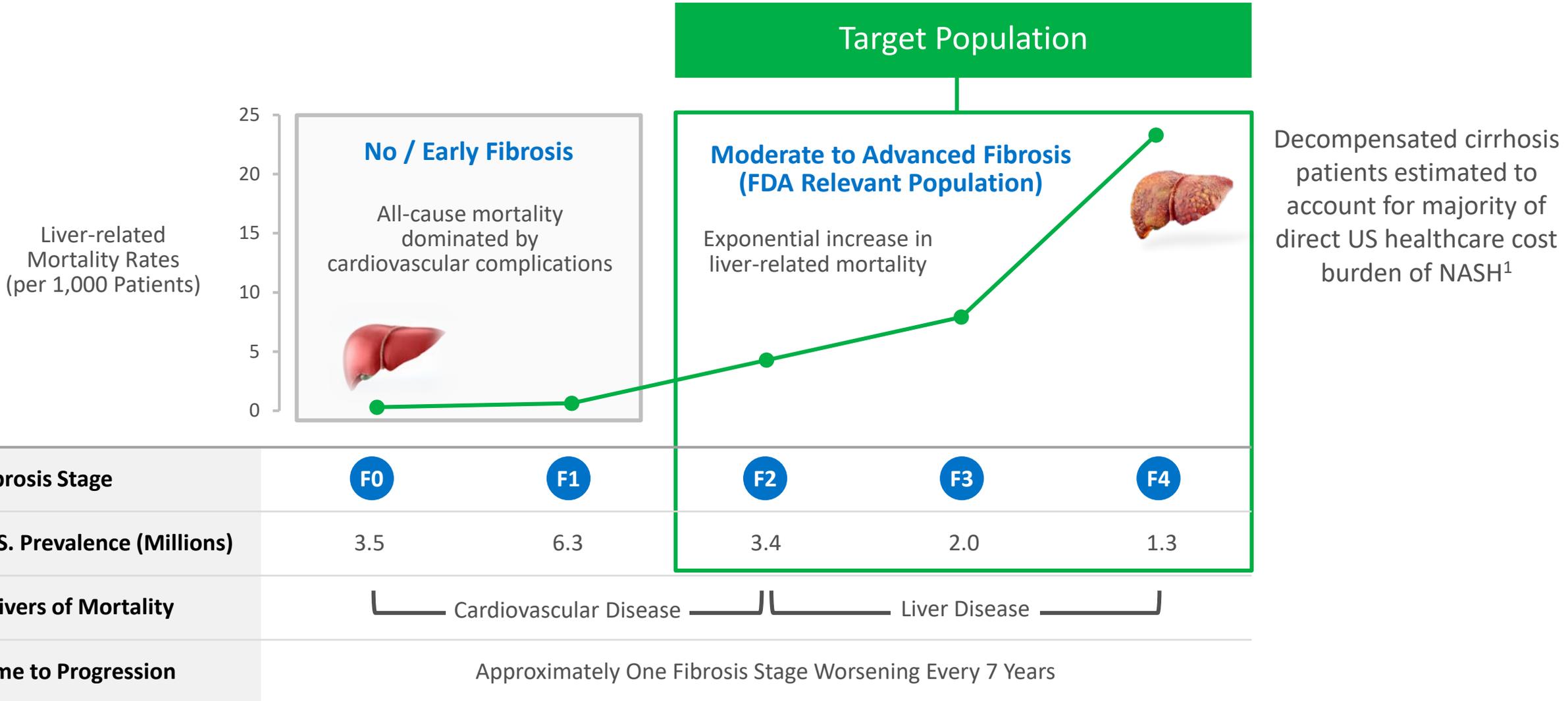
¹ Merck has committed to provide R&D reimbursement of up to \$50 million per year. If our R&D expenses exceed \$50 million in a given year, Merck can either reimburse up to an additional \$25 million for use in funding IND-enabling or later-staged activities or provide us with the equivalent value in in-kind services for such activities.
T2D: type 2 diabetes

Our Expansive Pipeline

	PRODUCT CANDIDATE	PRODUCT DESCRIPTION (DOSING FREQUENCY)	POTENTIAL INDICATIONS	STAGE OF DEVELOPMENT	WORLDWIDE COMMERCIAL RIGHTS	
<div style="display: flex; align-items: center;"> <div style="background-color: #0070c0; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin-right: 10px;">6</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Development Programs</div> </div>	Aldafermin (NGM282)	FGF19 Analog (Once Daily)	NASH	Phase 2b		Wholly-Owned
	NGM313 (MK-3655)	FGFR1c/KLB Agonistic Antibody (Once Monthly)	NASH, Type 2 Diabetes	Phase 1b	Licensed	
	NGM120	GFRAL Antagonistic Antibody (Long Acting)	Cancer, Cancer Anorexia/Cachexia Syndrome (CACS)	Phase 1a/1b		Option
	NGM217	Undisclosed (Long Acting)	Diabetes	Phase 1		Option
	NGM621	Complement C3 Inhibitory Antibody (Long Acting)	Dry AMD / Geographic Atrophy	Phase 1		Option
	NGM395	GDF15 Analog (Long Acting)	Metabolic	Preclinical		Wholly-Owned

FGF19: fibroblast growth factor 19; FGFR1c/KLB: fibroblast growth factor receptor 1c/beta-klotho; GFRAL: glial-cell-derived neurotrophic factor receptor alpha-like; GDF15: growth differentiation factor 15

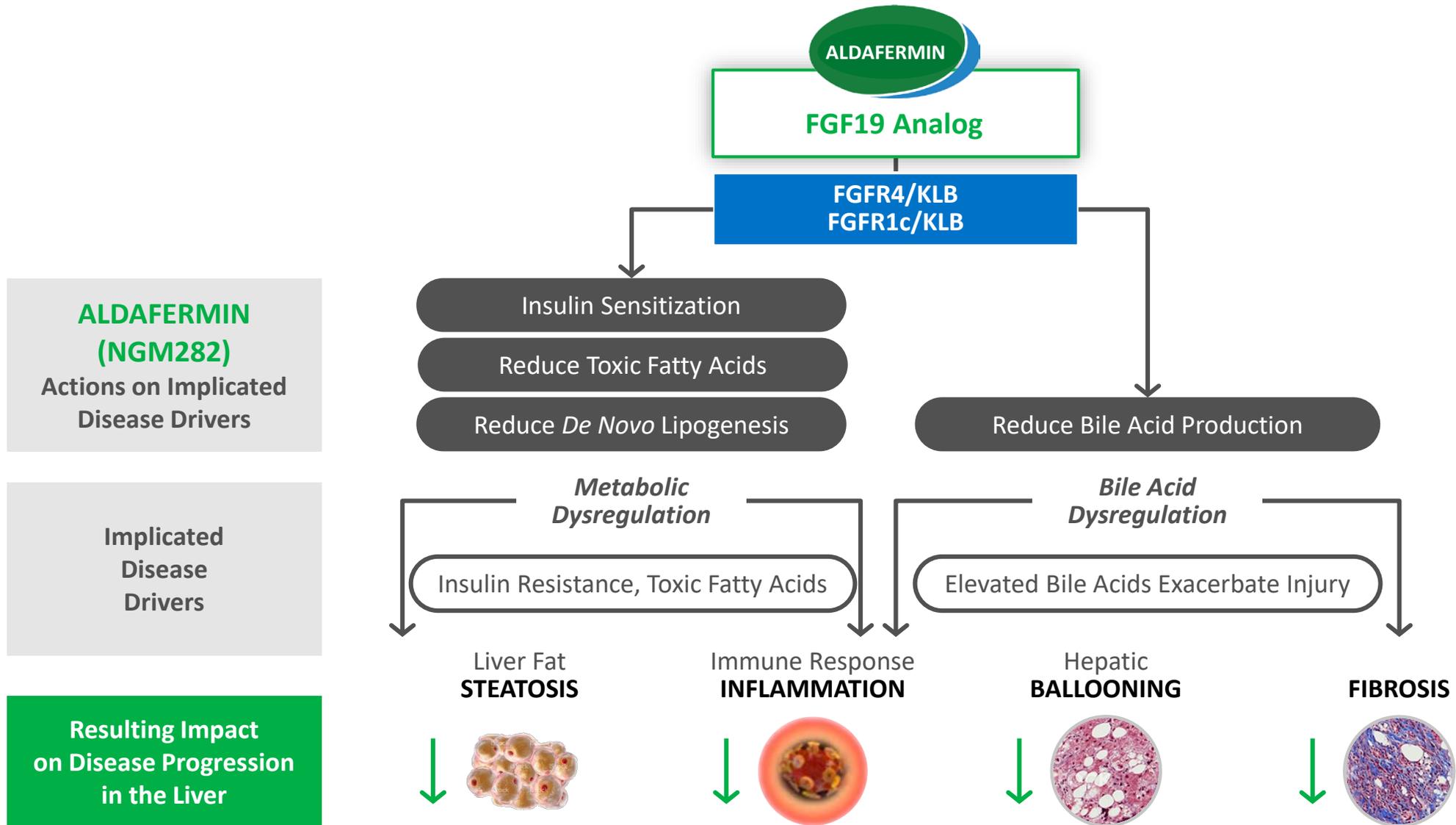
Improving Fibrosis Leads to Better Outcomes for NASH Patients



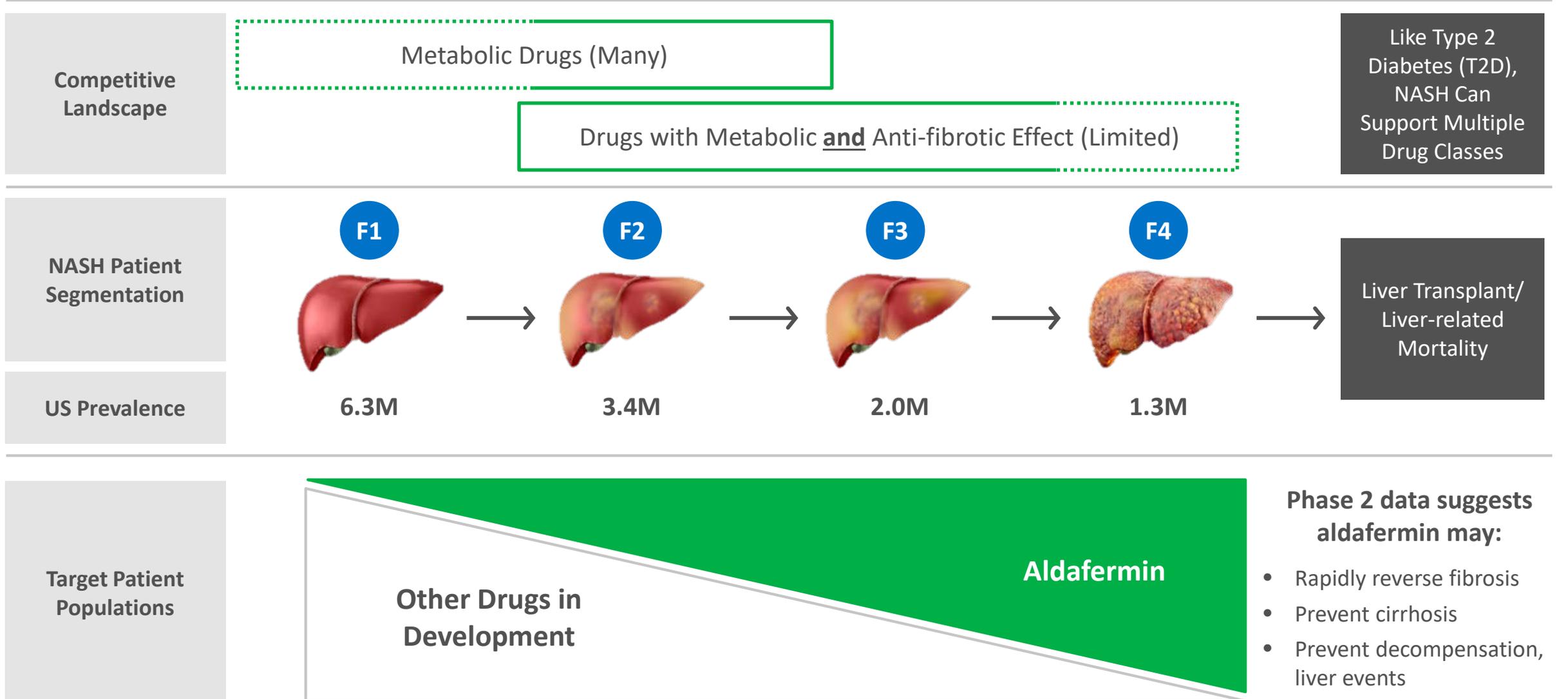
Sources: Dulai et al, Hepatology 2017, 65(5):1557-1565; Singh et al, Clin Gastroenterol Hepatol. 2015, 13(4): 643-654; Estes et al, Hepatology 2018, 67(1): 123-133.

¹ H Razavi, Paris NASH meeting July 5, 2018 presentation "The value proposition of NASH therapy on the burden of disease related to obesity"

Aldafermin Impacts the Key Drivers of NASH Pathogenesis



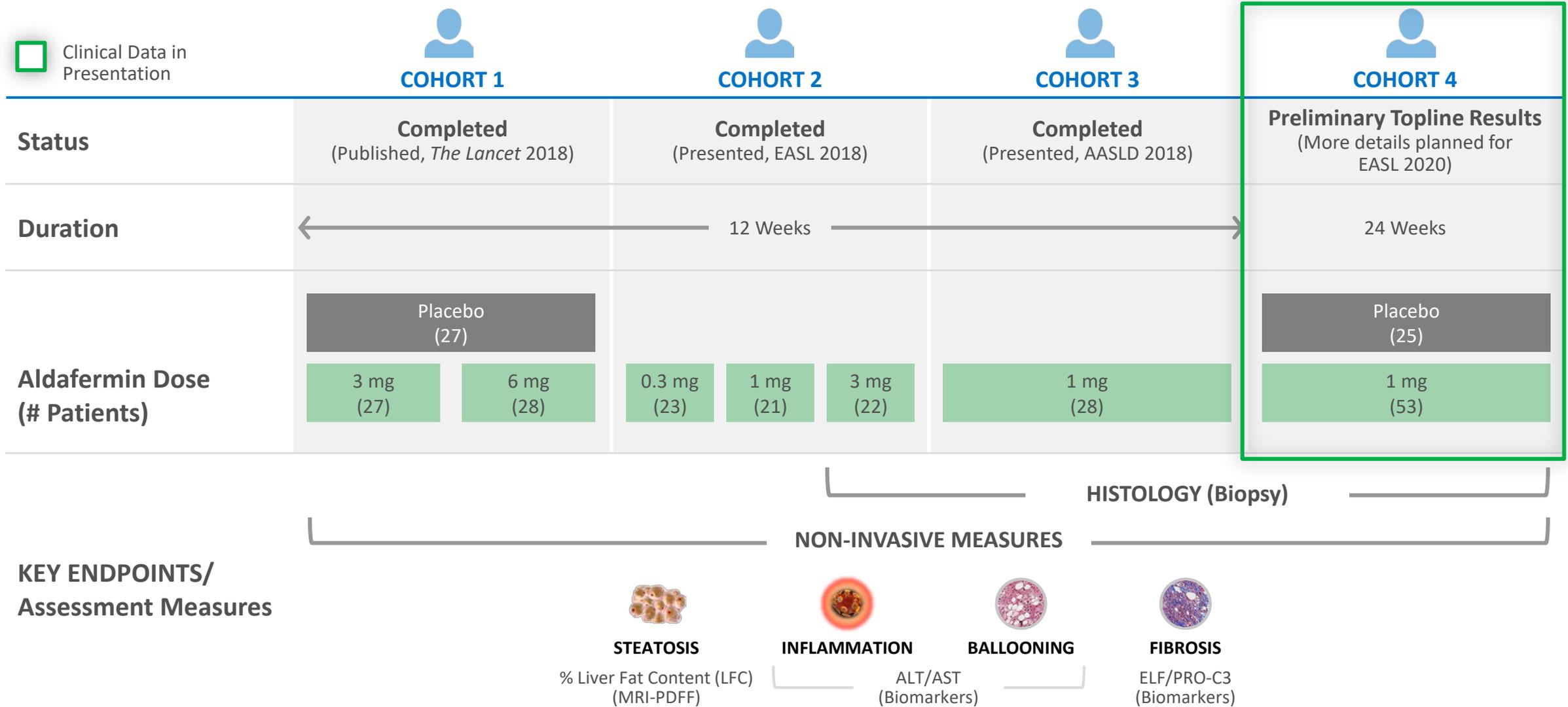
Unlike Many Other Drugs in Development, Aldafermin Targets Fibrosis Reversal and Cirrhosis Prevention in Advanced NASH Patients



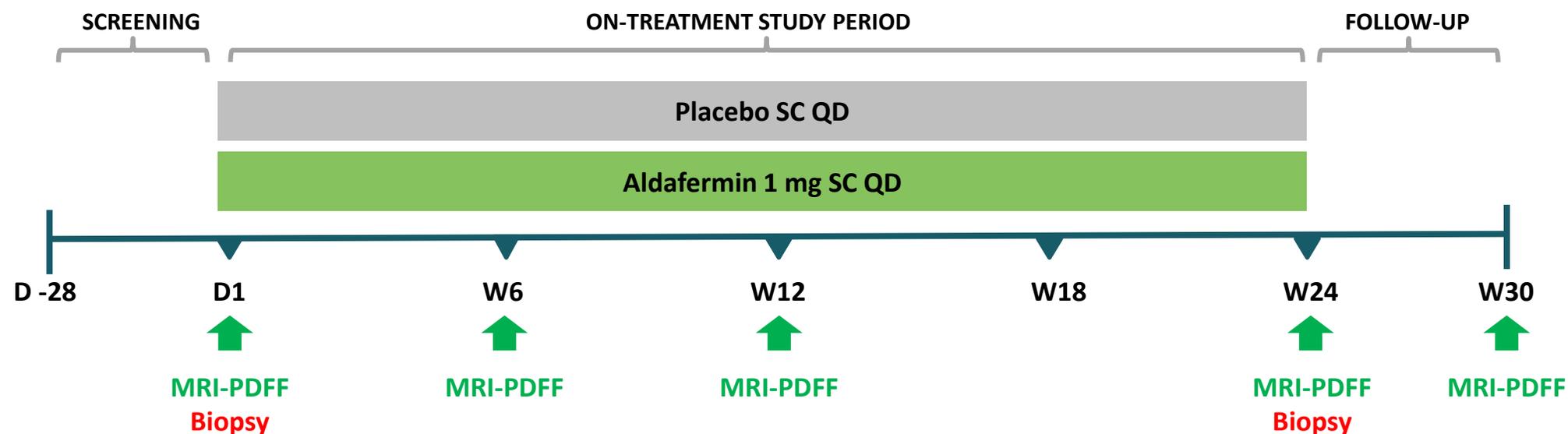
NASH Phase 2 Program Provides Foundation for Late-Stage Development of Aldafermin



Clinical Data in Presentation



Cohort 4: A 24-Week, Double-Blind, Placebo-Controlled Multi-Center Ph2 Study of Aldafermin in Patients with Biopsy-Proven NASH



Safety population	N=78	Aldafermin : placebo (2:1)
Efficacy population	N=77	At least one dose and valid post-dose efficacy value
Liver histology population	N=72	Valid, non-missing biopsy at baseline and W24

- Key inclusion criteria include:
 - Biopsy-confirmed NASH with NAS ≥ 4 (1 point in each component); stage 2 or 3 liver fibrosis (F2 or F3 by NASH CRN criteria)
 - Absolute liver fat content (LFC) $\geq 8\%$ by MRI-PDFF
 - ALT ≥ 19 IU/L in females, ALT ≥ 30 IU/L in males
- **Primary endpoint:** change from baseline in absolute LFC (as measured by MRI-PDFF) at W24
- **Secondary and exploratory endpoints** include ALT, AST, biomarkers of fibrosis and effect on liver histology at W24
- Over-encapsulated rosuvastatin (ROS 20 mg) started at W2 if low-density lipoprotein cholesterol (LDL-C) rise of 10 mg/dL observed

Patient Baseline Demographics and Characteristics (Cohort 4 Efficacy Population)

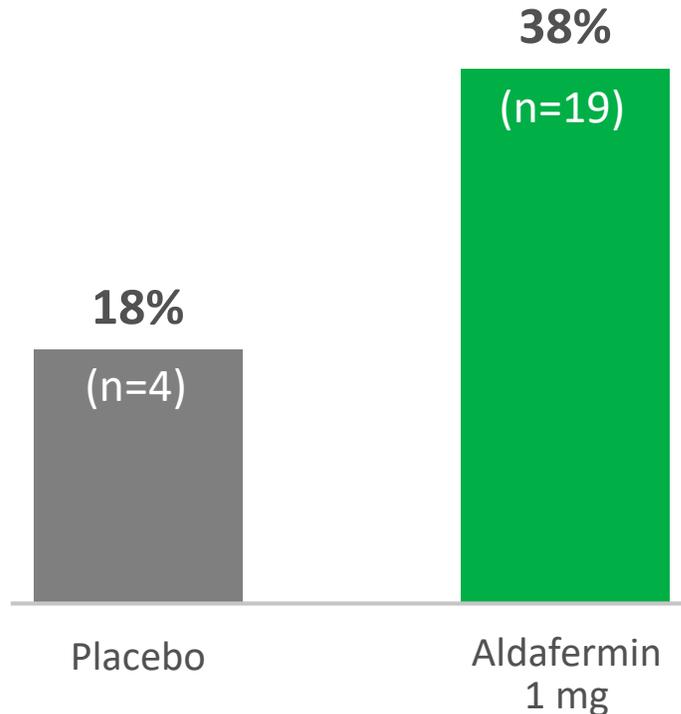


Parameters Mean (SD)	Placebo (n=25)	Aldafermin 1 mg (n=52)
Age (years)	54.1 (9.7)	53.0 (12.1)
Sex (Male/Female)	9 / 16	27 / 25
Weight (kg)	102.5 (29.7)	100.1 (21.0)
BMI (kg/m ²)	36.8 (9.0)	35.8 (6.4)
Waist (cm)	114.3 (17.0)	111.9 (15.4)
Type 2 Diabetes, n (%)	16 (64%)	31 (60%)
NAFLD Activity Score (NAS)	5.4 (1.1)	5.7 (1.1)
Fibrosis stage (F2 / F3) ¹	13 / 9	27 / 23
Liver Fat Content (% by MRI-PDFF)	18.5 (6.8)	18.0 (5.9)
Alanine aminotransferase, ALT (IU/L)	55.1 (29.6)	73.3 (39.6)
Aspartate aminotransferase, AST (IU/L)	44.3 (23.7)	54.5 (27.4)
HDL-C (mg/dL)	34.5 (16.7)	31.7 (12.5)
LDL-C (mg/dL)	95.0 (31.6)	95.1 (31.0)
Triglycerides (mg/dL)	167.7 (119.2)	194.2 (164.3)
Pro-C3 (ng/mL)	17.1 (7.0)	17.5 (8.4)

Cohort 4: Rapid and Sustained Improvement in Fibrosis

Fibrosis Improvement ≥ 1 Stage with No Worsening of NASH¹ at W24

(% of Patients)



Biopsy Reads

- Both baseline and W24 liver biopsies were centrally read by the same NASH-CRN pathologist
- Baseline biopsies were not re-read at end of study
- All biopsies were read blinded to treatment assignment and patient

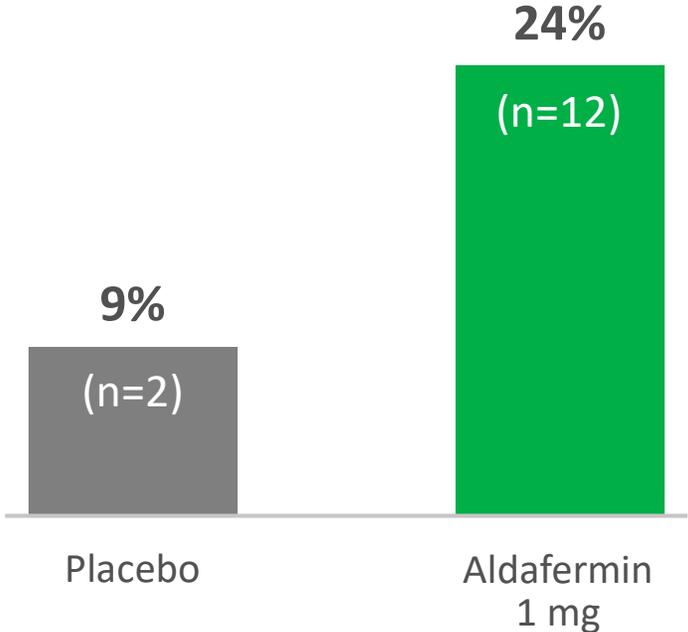
Liver Histology Population (n=50 aldafermin vs. n=22 placebo)

¹ Cohort 4 preliminary topline data; Defined as patients who have an improvement in liver fibrosis by ≥ 1 stage with no worsening of NASH (no worsening of steatosis, lobular inflammation or hepatocyte ballooning grade) from baseline to W24 (not powered for statistical significance)

Cohort 4: Additional Benefit in Resolution of NASH

Resolution of NASH without Worsening of Fibrosis¹ at W24

(% of Patients)



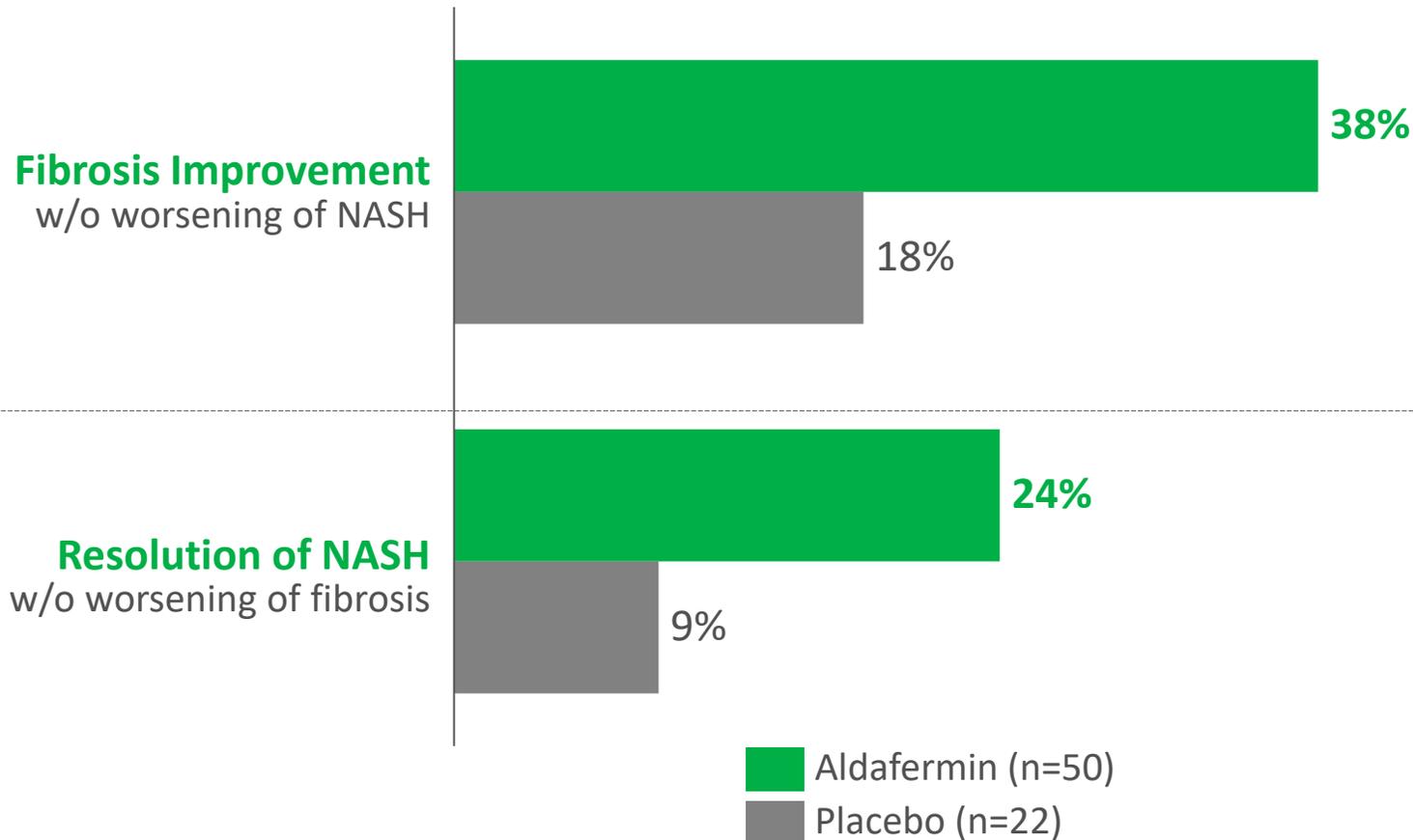
Liver Histology Population (n=50 aldafermin vs. n=22 placebo)

¹ Cohort 4 preliminary topline data; Defined as subjects having a NAS score of 0 or 1 for inflammation and 0 for ballooning, with no worsening of fibrosis (no progression of NASH CRN fibrosis stage) from baseline to W24 (not powered for statistical significance)

Potential Amplification of Fibrosis Improvement and Resolution of NASH with Longer Treatment Duration



Cohort 4 (W24)
1 mg aldafermin vs. placebo



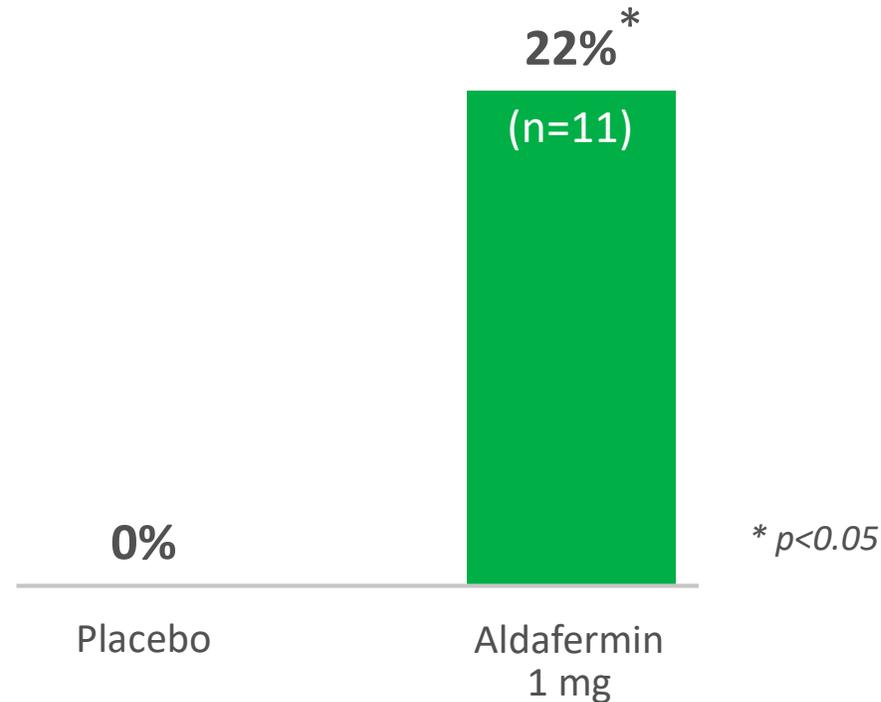
	Cohort 3 (W12) 1 mg aldafermin	Cohort 2 (W12) 3 mg aldafermin
Fibrosis Improvement w/o worsening of NASH	25%	42%
Resolution of NASH w/o worsening of fibrosis	13%	11%
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Cohort 4: Statistically Significant Proportion of Patients Achieved Both Fibrosis Improvement AND Resolution of NASH



Composite Endpoint of Fibrosis Improvement AND Resolution of NASH¹ at W24

(% of Patients)



Liver Histology Population (n=50 aldafermin vs. n=22 placebo)

¹ Cohort 4 preliminary topline data; Defined as patients who have an improvement in liver fibrosis by ≥ 1 stage with no worsening in NASH AND have a NAS score of 0 or 1 for inflammation and 0 for ballooning without worsening of fibrosis at W24 (not powered for statistical significance)

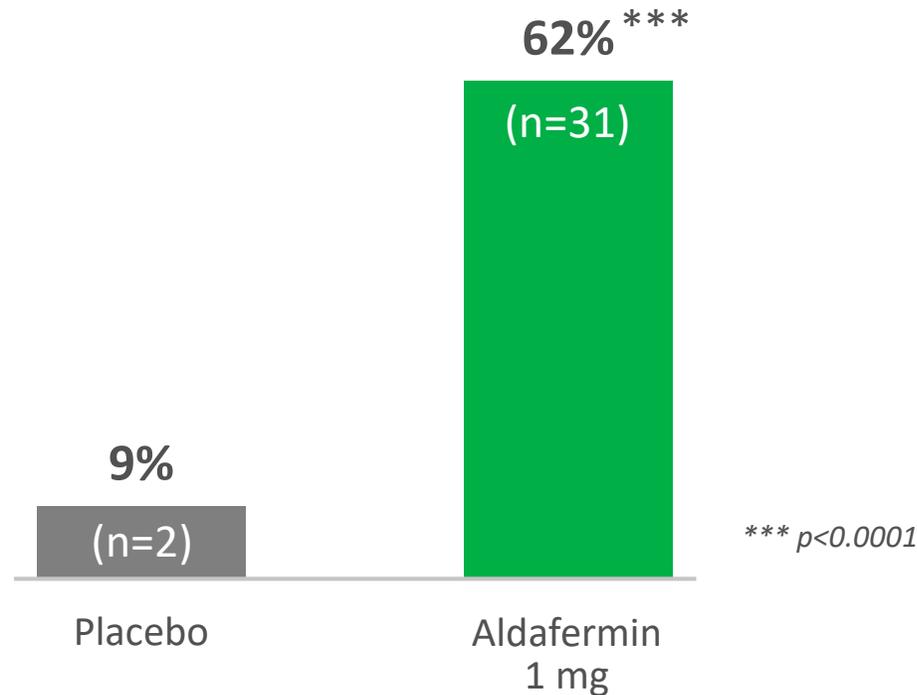
February 26, 2020

Cohort 4: Statistically Significant Proportion of Patients Achieved NAS Reduction of ≥ 2 Points



Improvement of NAS by ≥ 2 Points without Worsening of Fibrosis¹ at W24

(% of Patients)



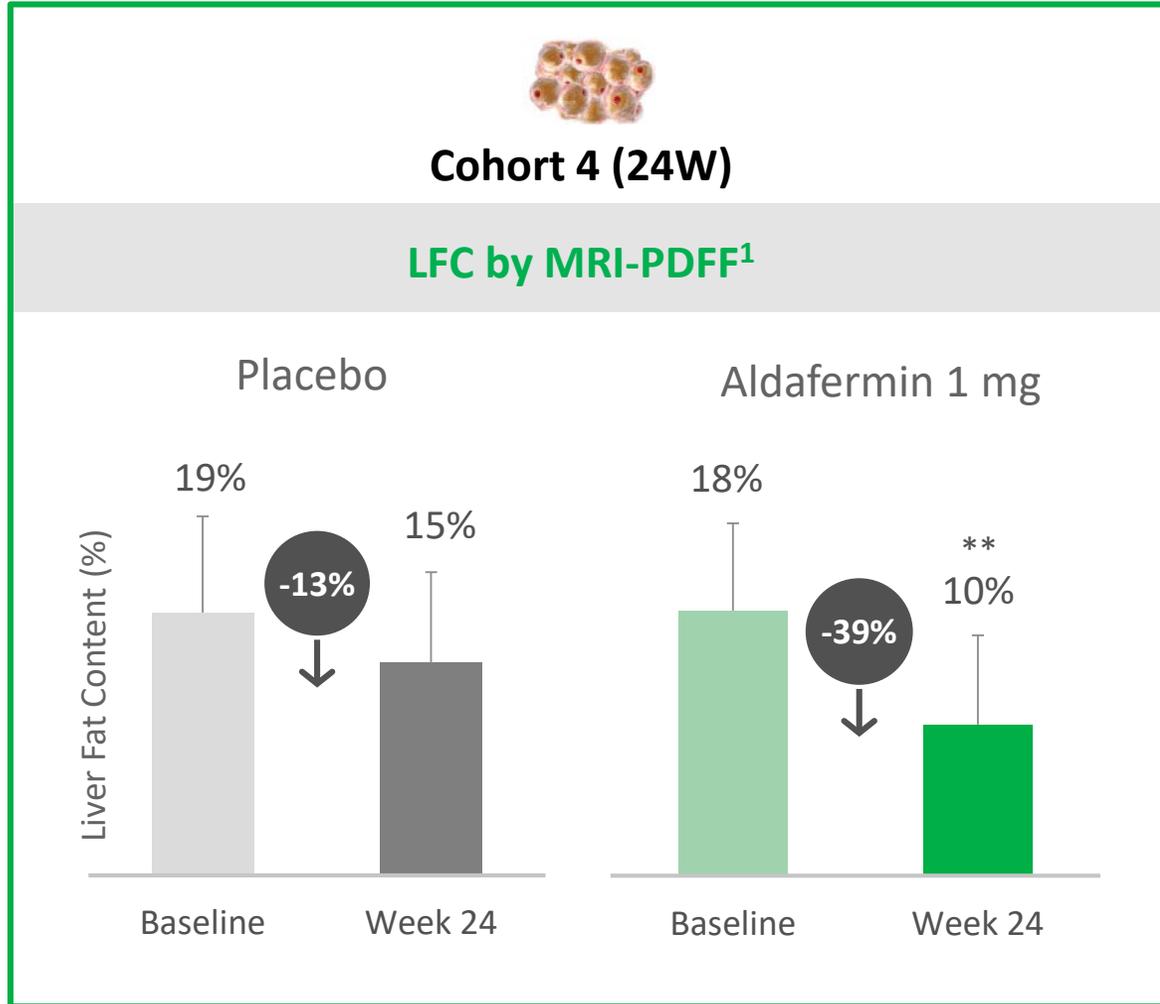
Statistically significant improvements in each NAS component of:

- Steatosis
- Lobular Inflammation
- Ballooning

Liver Histology Population (n=50 aldafermin vs. n=22 placebo)

¹ Cohort 4 preliminary topline data; endpoint not powered for statistical significance

Cohort 4 Primary Endpoint Met: Statistically Significant Reduction in Absolute Liver Fat Content (LFC)

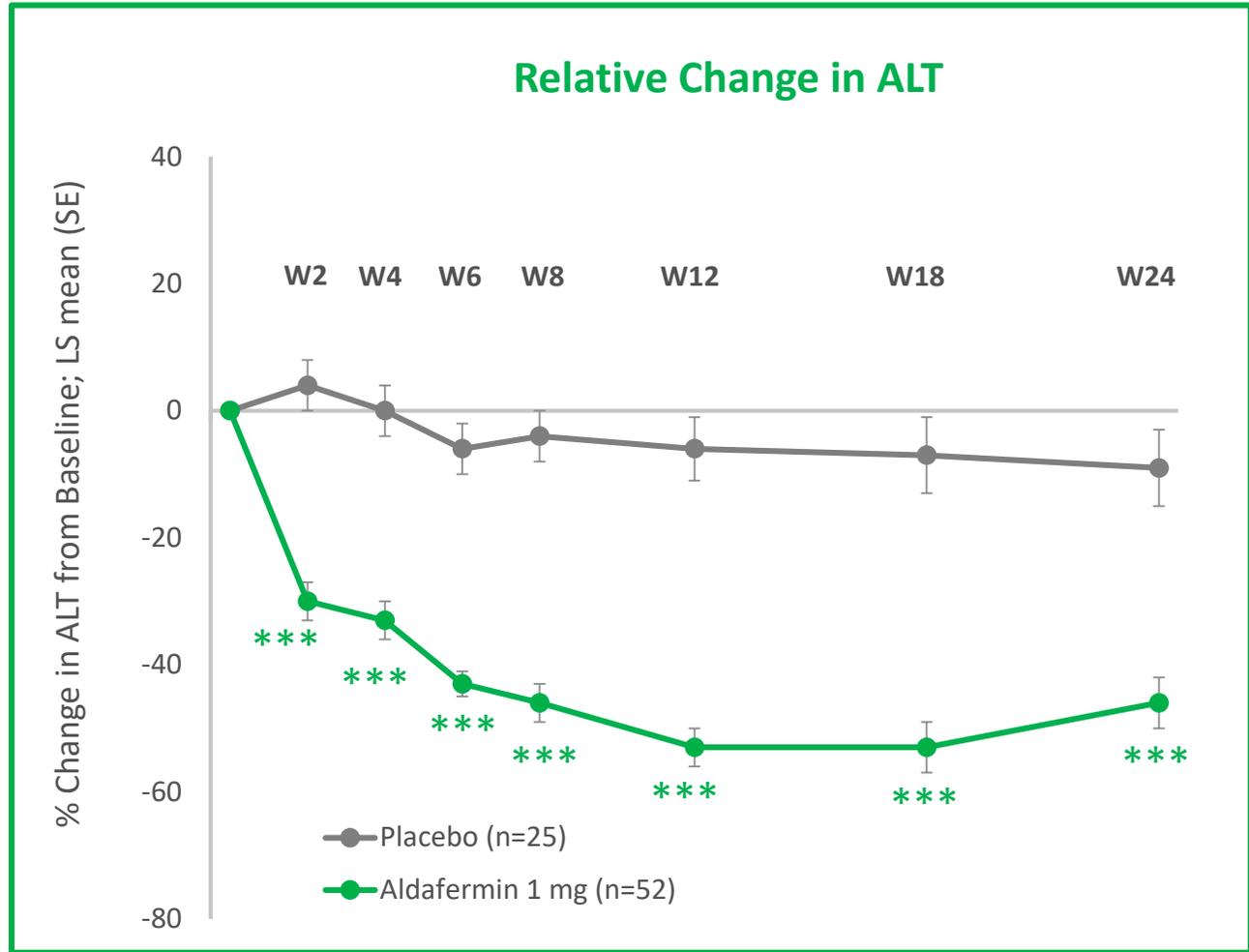
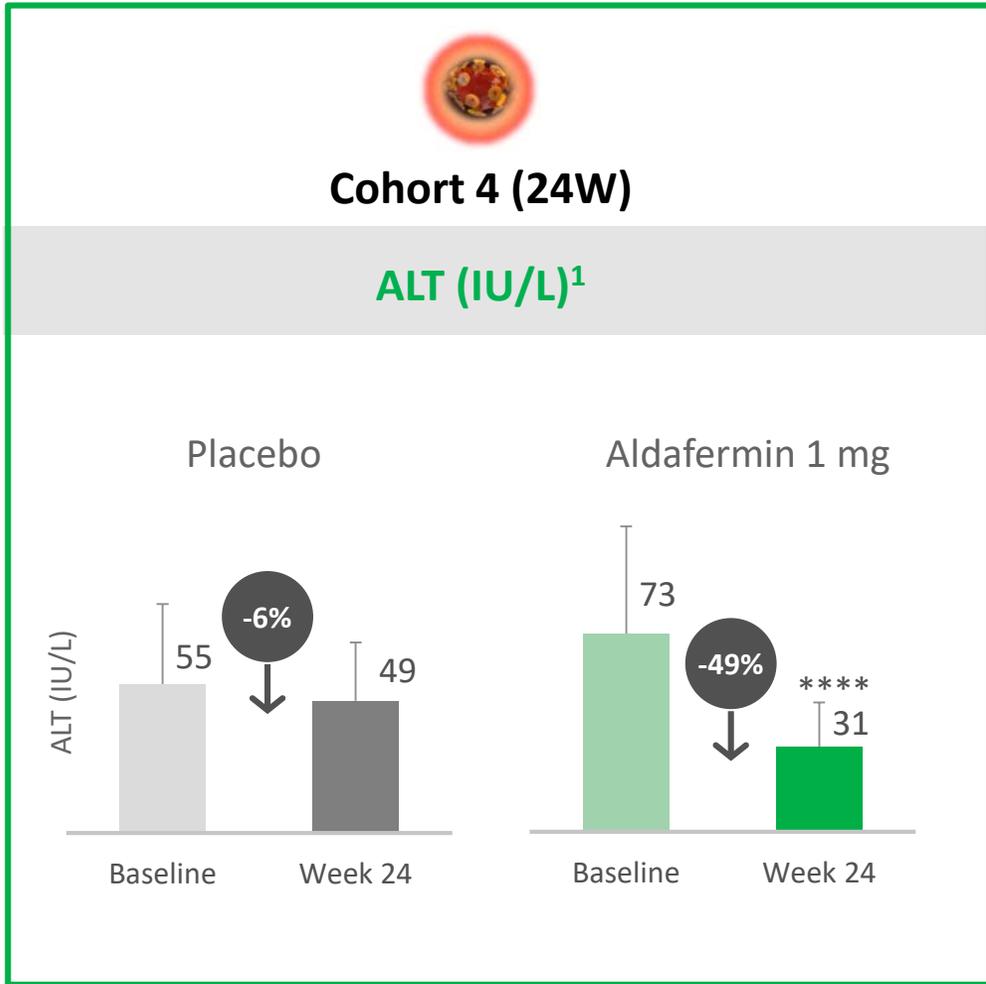


- 68% of aldafermin patients achieved $\geq 5\%$ absolute LFC reduction vs. 24% placebo
- 66% of aldafermin patients achieved $\geq 30\%$ relative LFC reduction vs. 29% placebo
- Consistent response on LFC across Cohorts 1-4

**P<0.01 vs. placebo

¹ Cohort 4 preliminary topline data; Relative values are calculated as mean change from baseline
February 26, 2020

Cohort 4: Rapid and Sustained Decrease in ALT to Near Normal Levels with Aldafermin



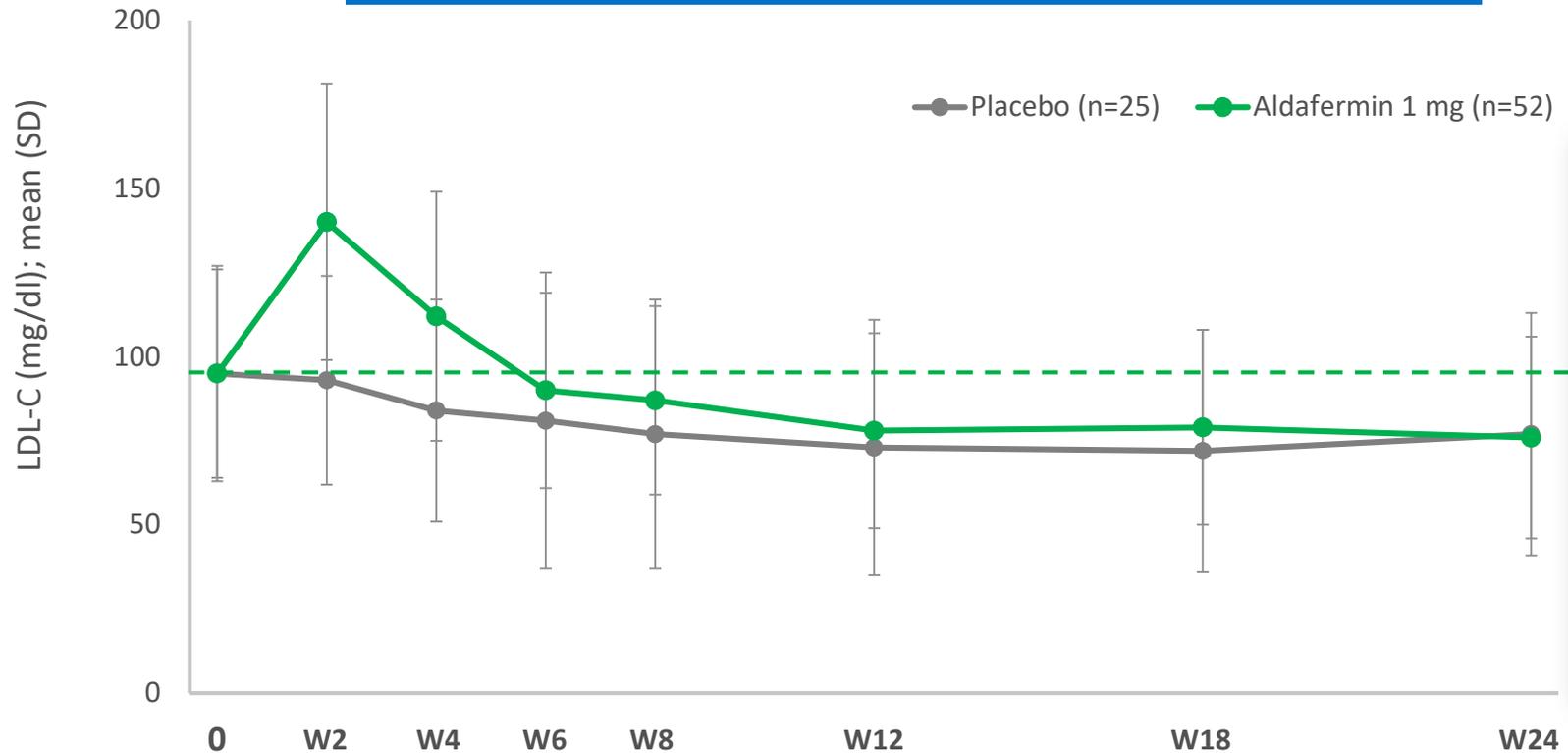
Statistically significant reductions vs. placebo also observed with AST and PRO-C3

****P<0.0001, ***P<0.001 vs. placebo

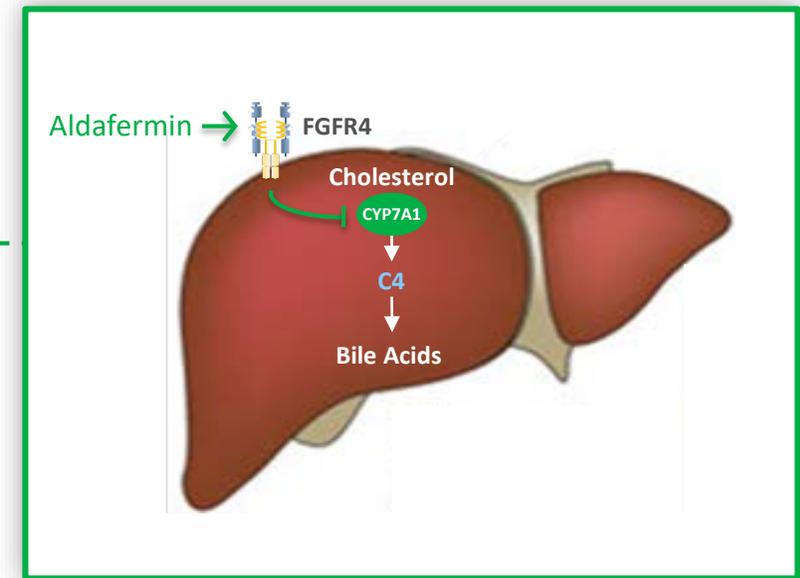
Cohort 4: LDL-C Changes Effectively Managed with Statin Therapy



Add Rosuvastatin to Placebo or Aldafermin as Needed
(If Needed, Titration at W2, W4, W8)



LDL-C elevation is a direct effect of FGF19's inhibition of the classical bile acid synthesis pathway



- Mean LDL-C levels returned to ~77 mg/dL for both placebo and aldafermin arms
- Statistically significant reduction in triglycerides observed as early at W2 and sustained through W24

Cohort 4 preliminary topline data

C4 = 7 α -hydroxyl-4-cholesten-3-one; CYP7A1: cholesterol 7 alpha-hydroxylase

Cohort 4: Aldafermin Generally Well Tolerated and Most Common Adverse Events Comparable to Placebo



TEAE Classification	Placebo (N=25)	Aldafermin 1 mg (N=53)
Any TEAE	22 (88.0%)	46 (86.8%)
TEAE Leading to Drug Withdrawal	1 (4.0%)	0
Serious Adverse Event (SAE) ¹	3 (12.0%)	2 (3.8%)
Drug-Related TEAE	11 (44.0%)	27 (50.9%)
TEAE Leading to Death	0	0

- All SAEs were deemed to be not related to treatment by site investigator

Most Common (>10%) Adverse Events	Placebo (N=25)	Aldafermin 1 mg (N=53)
Diarrhea	6 (24.0%)	15 (28.3%)
Headache	9 (36.0%)	7 (13.2%)
Abdominal Distension	3 (12.0%)	7 (13.2%)
Nausea	6 (24.0%)	5 (9.4%)
Fatigue	4 (16%)	3 (5.7%)
Diabetes Mellitus	5 (20.0%)	2 (3.8%)
Peripheral Edema	3 (12.0%)	2 (3.8%)

- Pruritus (4% aldafermin vs. 8% placebo)
- Injection site bruising (6% aldafermin vs. 0% placebo)

Cohort 4 preliminary topline data

¹ SAEs: Placebo (mental status changes; appendicitis; anxiety); Aldafermin (rectal bleeding; post-biopsy bleeding)

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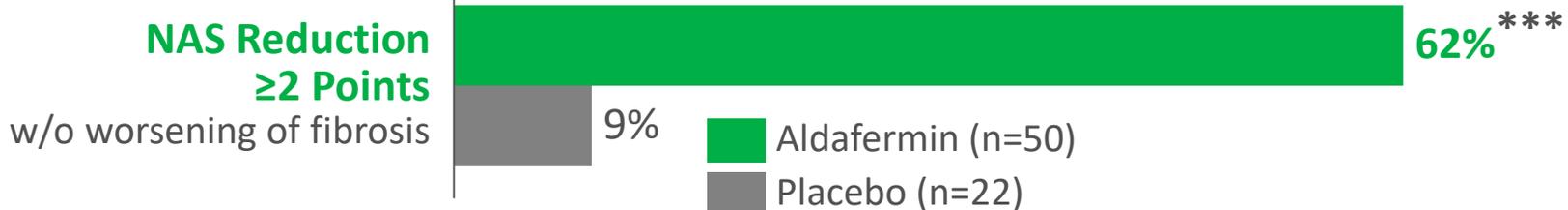
Phase 2 Data Supports Aldafermin's Potential as Differentiated Monotherapy for Treatment of NASH with Established Fibrosis



Cohort 4 (W24) 1 mg aldafermin vs. placebo

Cohort 3 (W12) 1 mg aldafermin

Cohort 2 (W12) 3 mg aldafermin



	25%	42%
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	13%	11%
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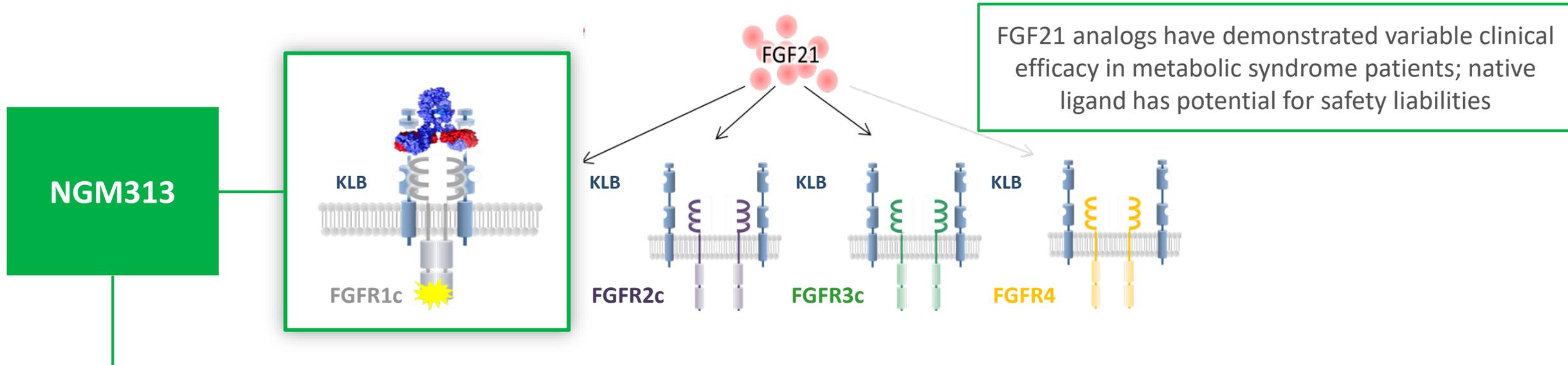
*** $p < 0.0001$
* $p < 0.05$

Summary of Aldafermin Cohort 4 Preliminary Topline Results



- **Meaningful improvements in histology regulatory endpoints:** fibrosis improvement, resolution of NASH and the composite endpoint requiring achievement of both
- Aldafermin's differentiated **rapid dual anti-fibrotic and metabolic effect** is evidenced by the significant improvements observed as early as two weeks
- Cohort 4 data suggest that the histological effects we observed at 12 weeks are **sustained and potentially amplified with extended treatment**
- **Favorable tolerability profile:** most common adverse events occurred with similar frequency in placebo and aldafermin arms

NGM313 (MK-3655) for the Treatment of NASH and Type 2 Diabetes



- Agonistic antibody that selectively activates FGFR1c / KLB to regulate energy metabolism
- Potential to be once-monthly injectable insulin sensitizer for treatment of NASH and T2D
- Completed Phase 1 SAD/MAD study in obese, insulin resistant subjects and Phase 1b study in subjects with NAFLD
- Single dose of NGM313 resulted in **significant reductions in liver fat content and improvement in metabolic markers** based on preliminary data from a Phase 1b study in obese, insulin resistant subjects with NAFLD **after five weeks**
- Well-tolerated across Phase 1 and Phase 1b studies
- **Merck exercised its option and licensed NGM313 and other FGFR1c/KLB agonists in 4Q18**

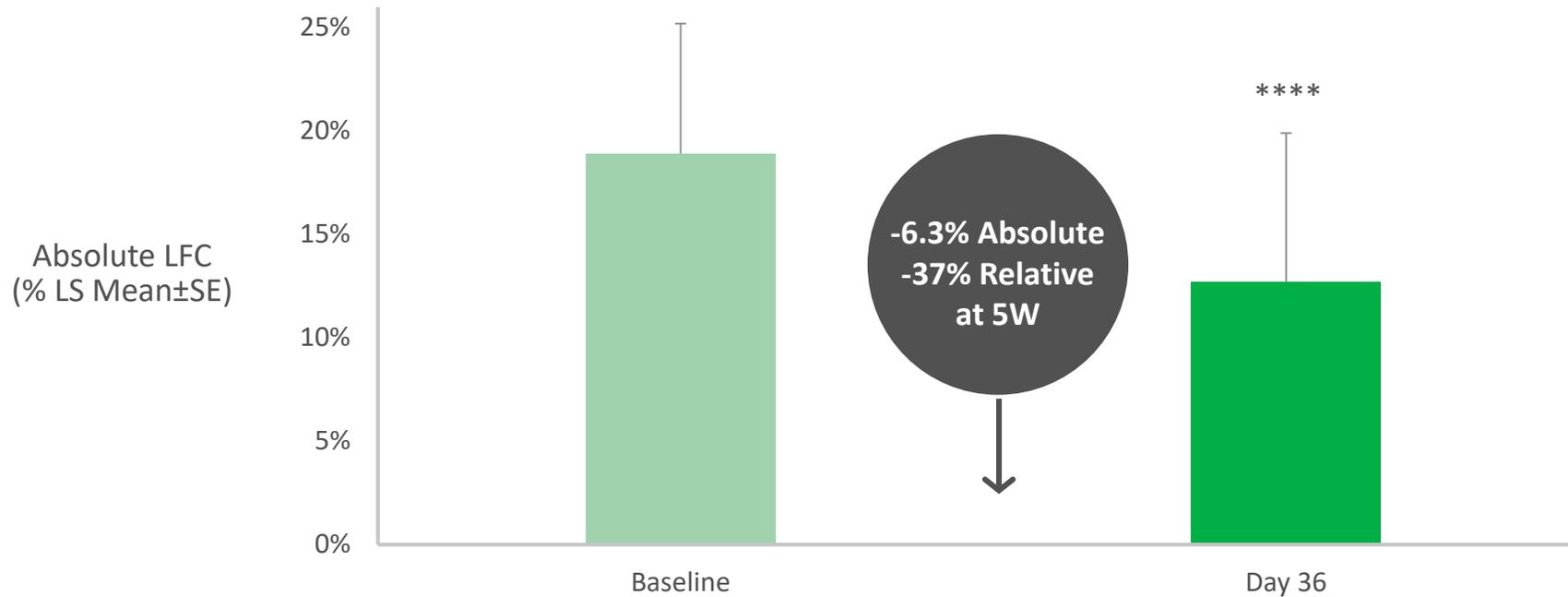
Significant Reduction in LFC After 5 Weeks Following Single Dose of NGM313 (MK-3655)



Phase 1b Study in Obese, Insulin Resistant Subjects with NAFLD



Absolute LFC
MRI-PDF



Pioglitazone 45 mg

(Positive Control)

- 4.0% absolute (25% relative) LFC reduction at 5W

NGM313

Statistically Significant Improvements In:

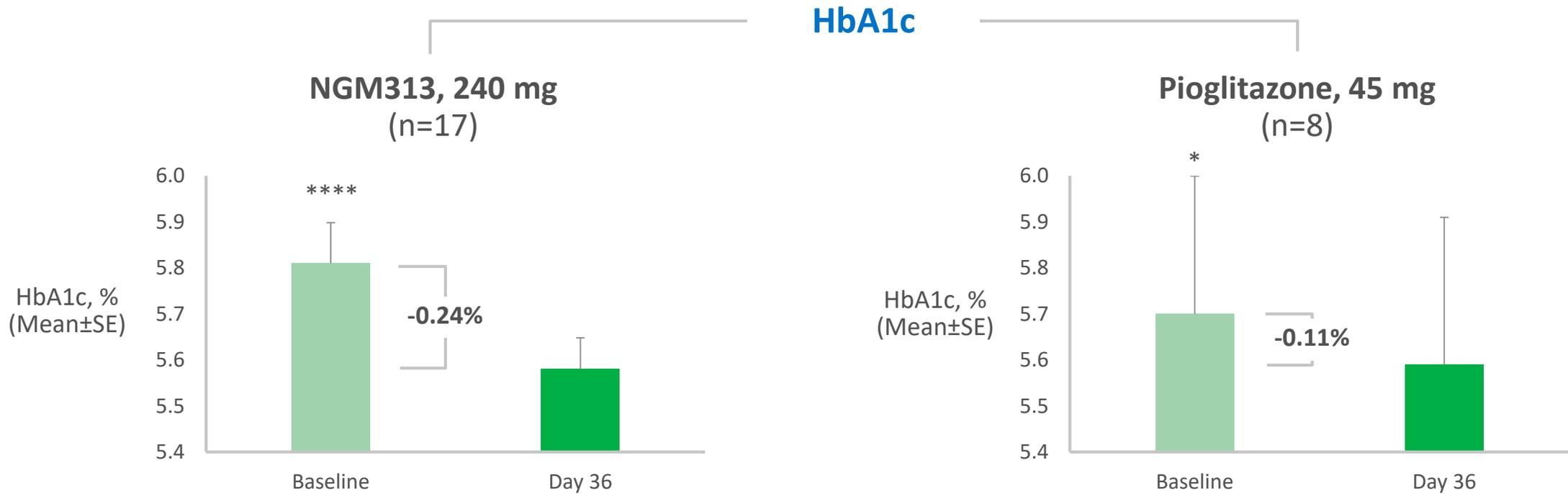
- ALT and AST
- Triglycerides
- HDL-C, LDL-C
- PRO-C3

**** $p < 0.0001$

Rapid Reduction in HbA1c Without Hypoglycemia After Single Dose of NGM313 (MK-3655)



Phase 1b Study in Obese, Insulin Resistant Subjects with NAFLD

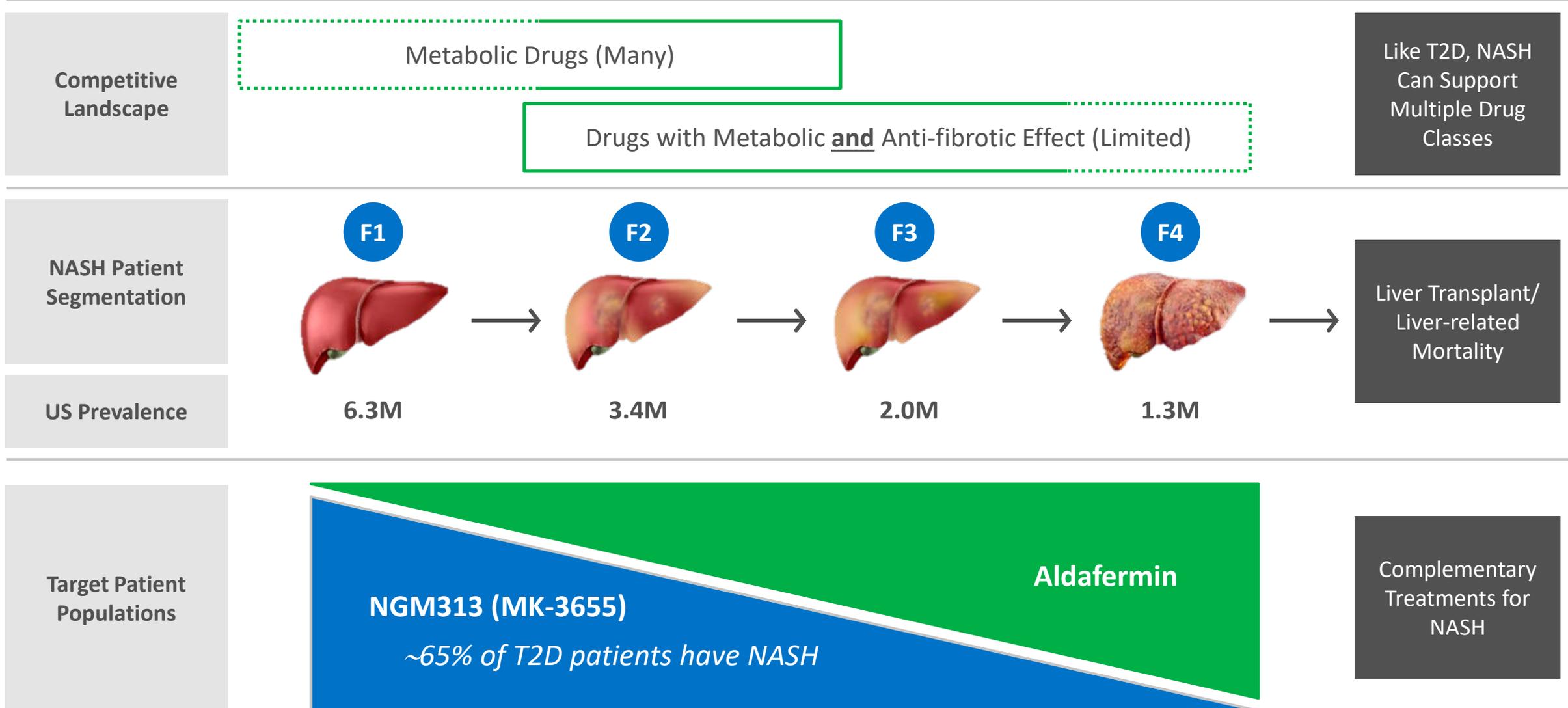


Reduction in HbA1c observed in insulin-resistant, non-diabetic patients supports promise of NGM313 to potentially improve glucose control in patients with T2D

NGM313 increases body weight by 1.6 kg (no edema or fluid retention) vs. 2.4 kg increase with pioglitazone at day 36

* p<0.05; ****p<0.0001

NGM313 (MK-3655) has Potential to Complement Aldafermin by Targeting NASH Population with T2D

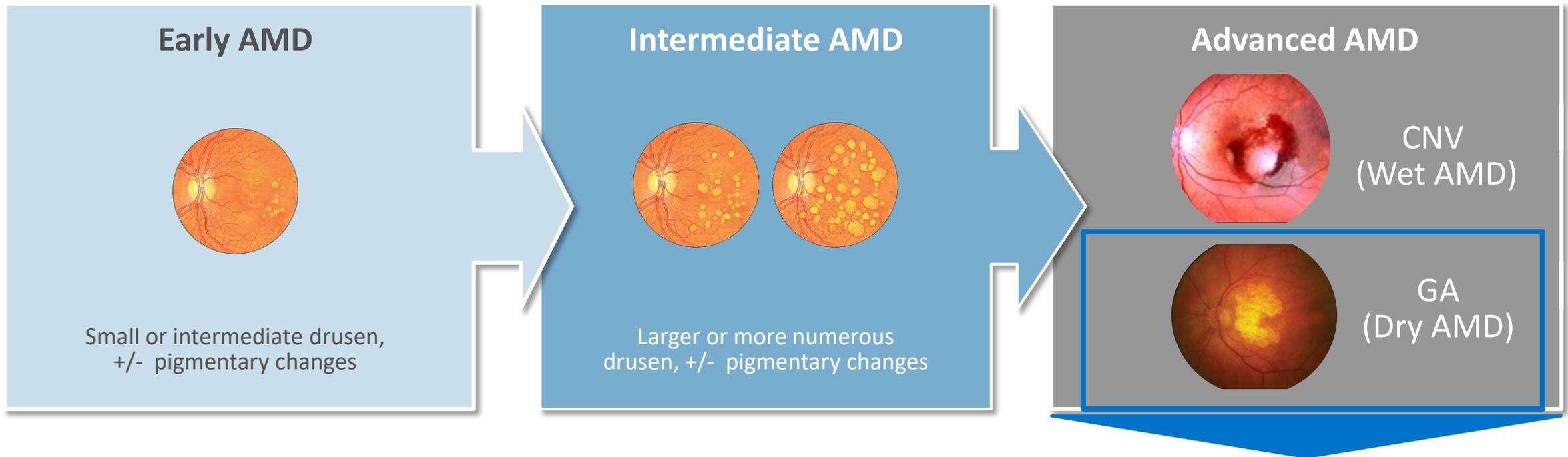


Beyond NASH, an Expansive Pipeline in Other Indications

6
Development Programs

PRODUCT CANDIDATE	PRODUCT DESCRIPTION (DOSING FREQUENCY)	POTENTIAL INDICATIONS	STAGE OF DEVELOPMENT	WORLDWIDE COMMERCIAL RIGHTS	
Aldafermin (NGM282)	FGF19 Analog (Once Daily)	NASH	Phase 2b		Wholly-Owned
NGM313 (MK-3655)	FGFR1c/KLB Agonistic Antibody (Once Monthly)	NASH, Type 2 Diabetes	Phase 1b	Licensed	
NGM120	GFRAL Antagonistic Antibody (Long Acting)	Cancer, Cancer Anorexia/Cachexia Syndrome (CACS)	Phase 1a/1b		Option
NGM217	Undisclosed (Long Acting)	Diabetes	Phase 1		Option
NGM621	Complement C3 Inhibitory Antibody (Long Acting)	Dry AMD / Geographic Atrophy	Phase 1		Option
NGM395	GDF15 Analog (Long Acting)	Metabolic	Preclinical		Wholly-Owned

Geographic Atrophy (GA) is an Advanced Form of AMD

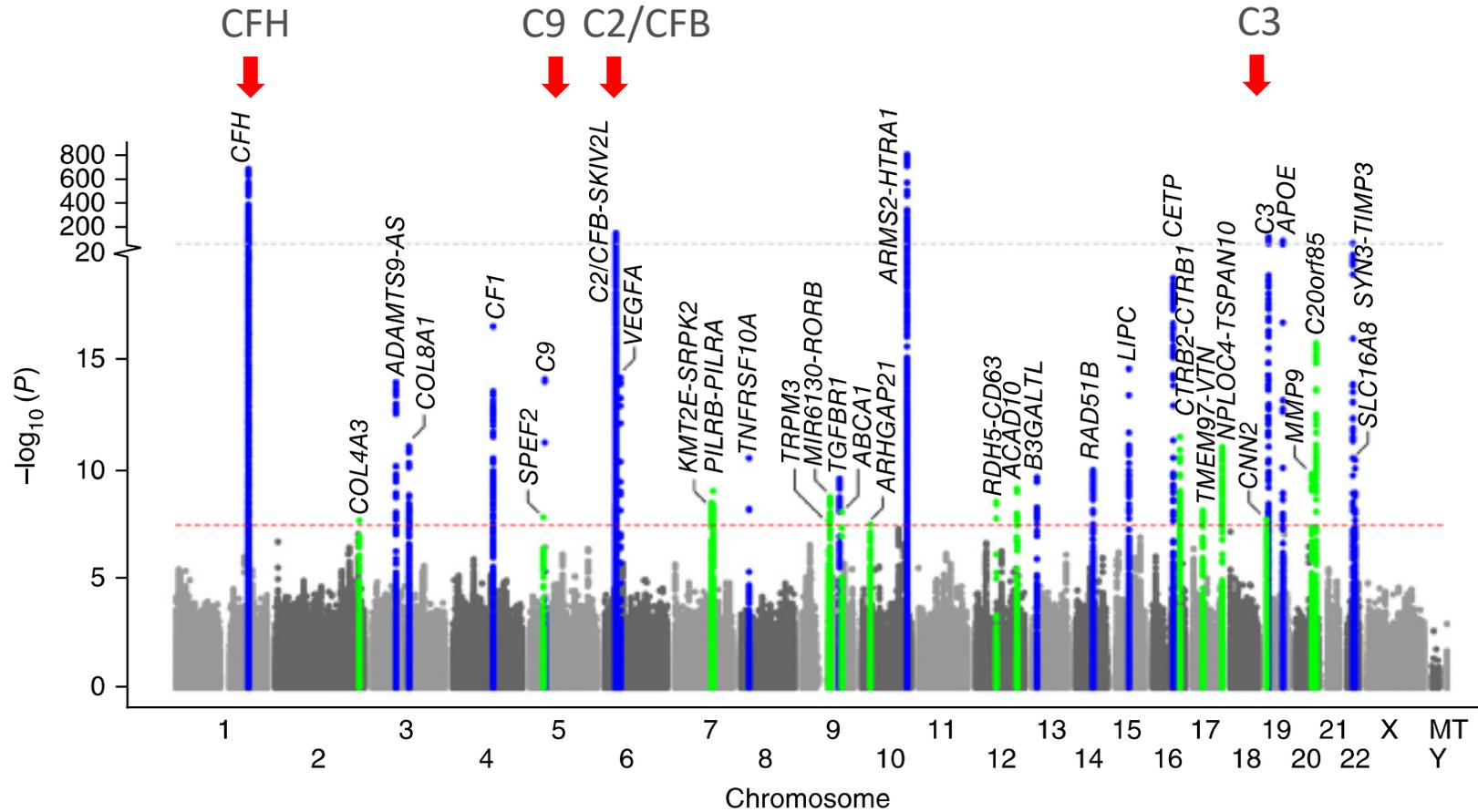


- Geographic atrophy (GA) is the dry form of advanced AMD, characterized by progressive and irreversible loss of photoreceptors, retinal pigment epithelium (RPE) and choriocapillaris
- GA is typically bilateral and lesion enlargement results into irreversible blindness
- GA affects ~5 million people globally and ~ 1 million people in the US
- Currently no approved treatment for GA

CNV = choroidal neovascularization

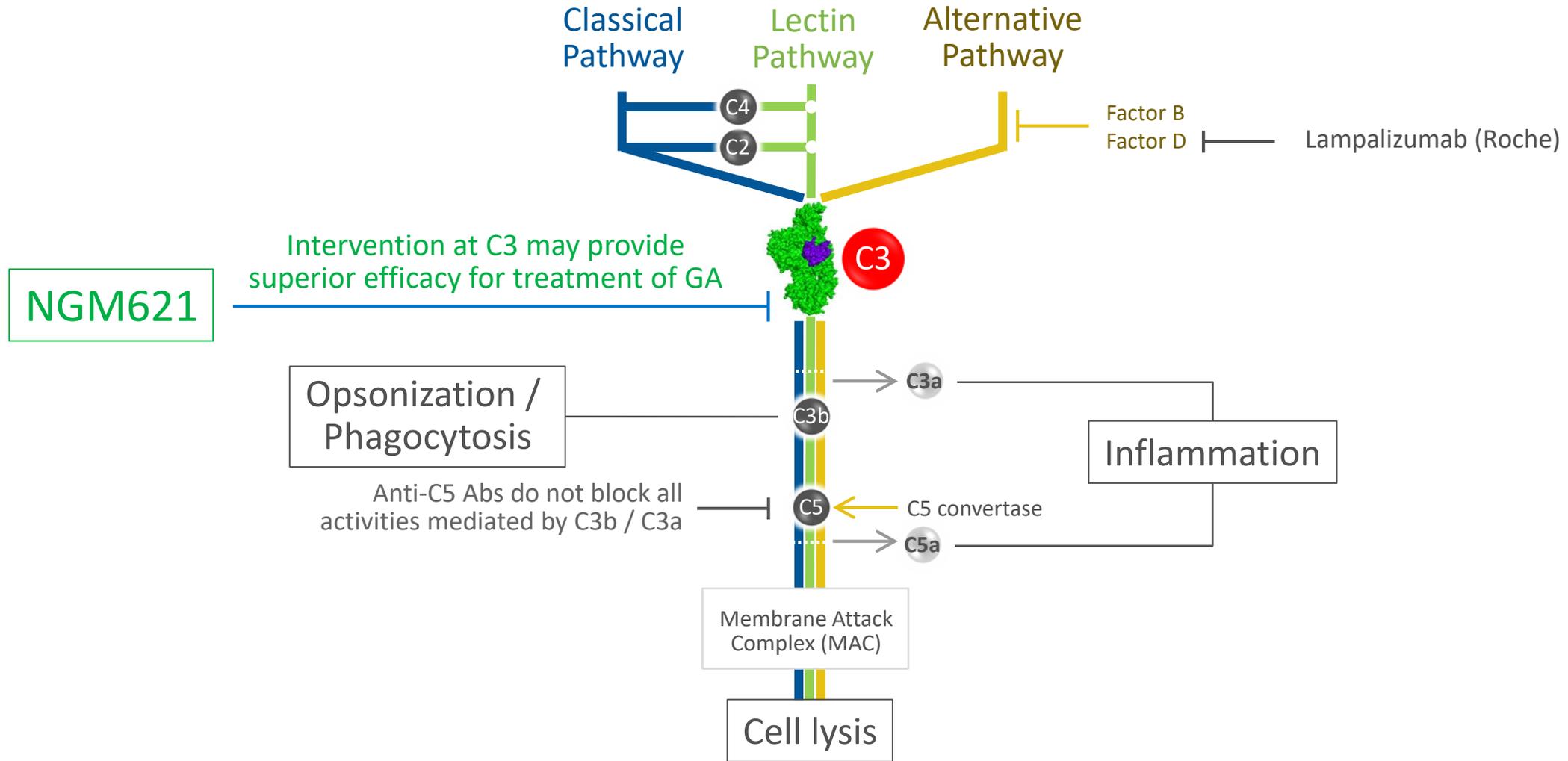
Fleckenstein et al, *Ophthalmology* 2018, 125(3): 369-390; Friedman et al, *Arch Ophthalmol.* 2004, 122: 564-572

Complement Activation is Associated with Development of Advanced AMD

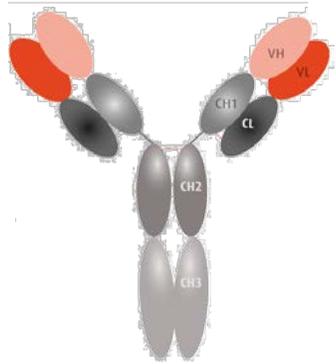


Variants in the complement pathway account for the majority of the known genetic risk for AMD

NGM621 Targets Complement C3, Blocking All Three Pathways of Complement Activation

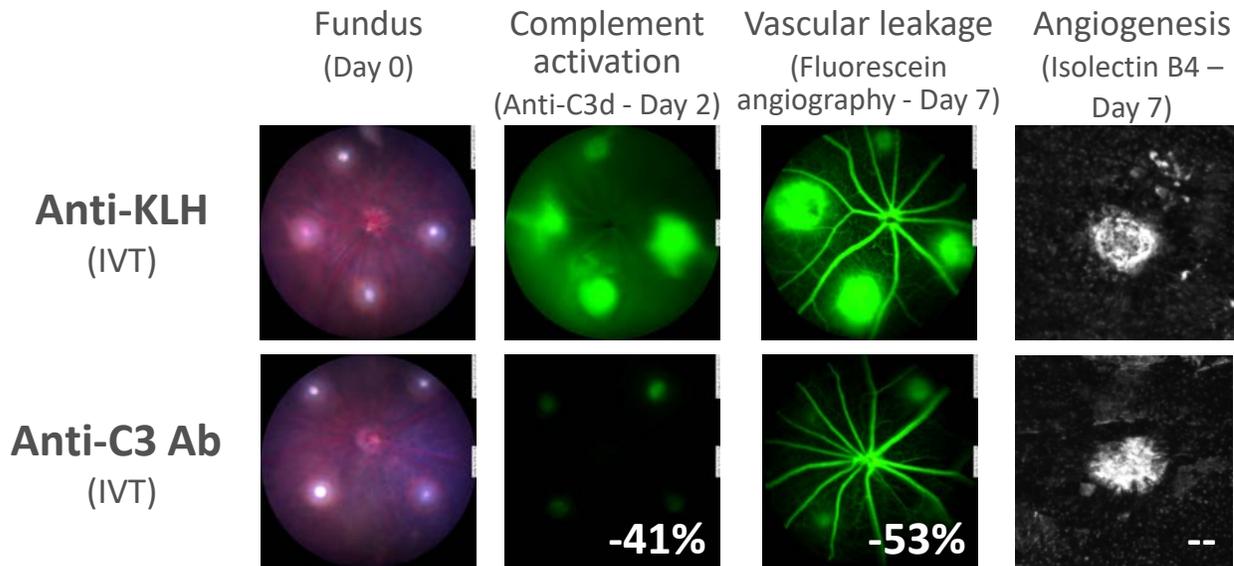


NGM621: A Potent Anti-Complement C3 Antibody

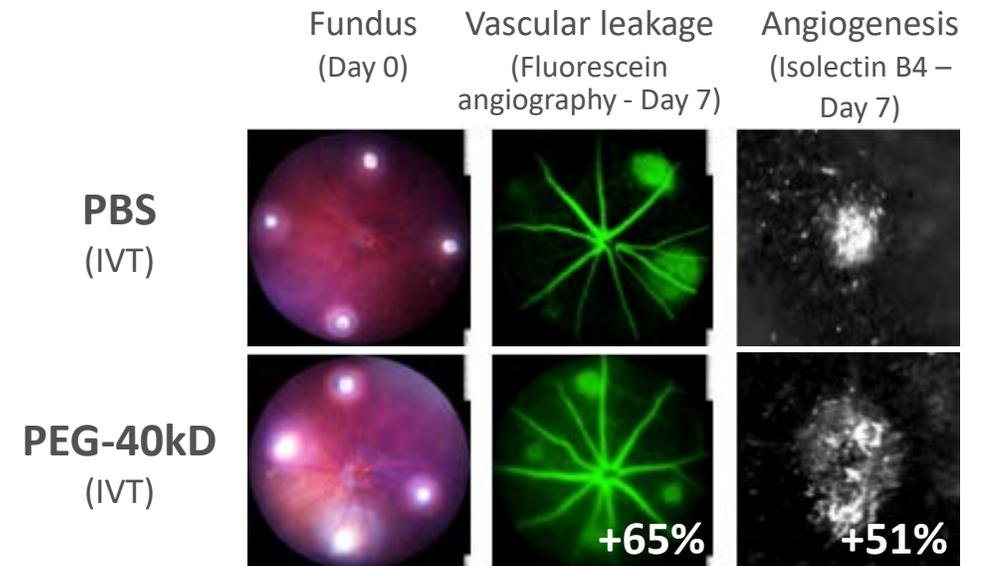


- Antibody that has high binding affinity for human C3 ($K_D < 1$ nM)
- Potent inhibition of both classical and alternative pathways of complement activation ($IC_{50} \sim 5-6$ nM)
- Potential for QM (monthly) or Q2M (EOM) intravitreal dosing

Anti-C3 Ab reduces vascular leakage in laser injury-induced CNV in mice



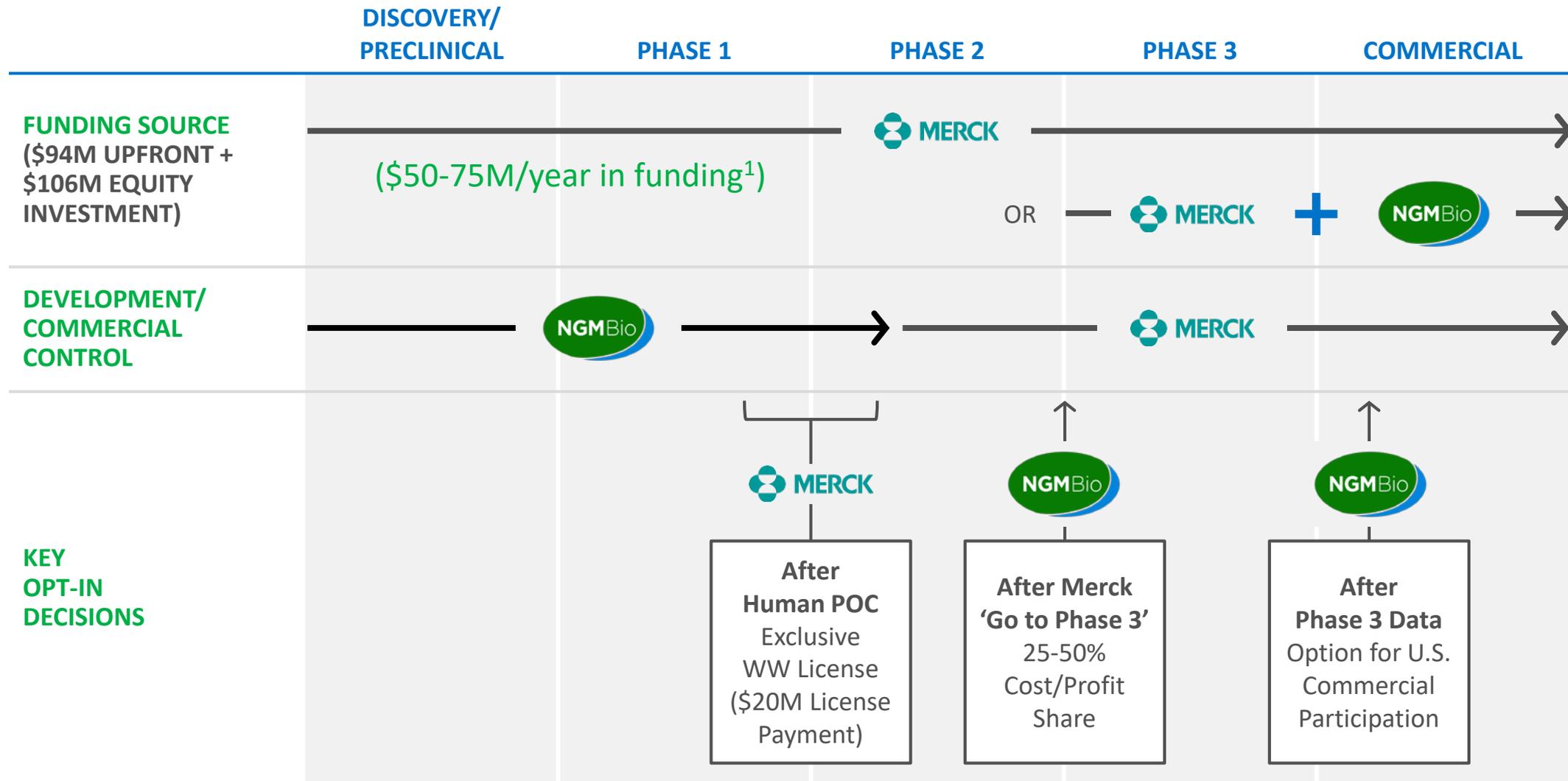
Antibody is preferred modality; PEG-40kD exacerbates laser injury-induced CNV in mice



NGM621 Development

- Initiated Phase 1 open-label single dose and multiple dose study in patients with GA
- Primary objective to evaluate the safety, tolerability and pharmacokinetics of intravitreal injection(s) of single and multiple doses of NGM621
 - Estimated enrollment of ~24 patients with GA secondary to AMD
- Study enables a potential Phase 2 POC study in GA
- Favorable tolerability profile observed from 5W GLP toxicology study in monkey
- Program is subject to Merck option to license the program

Our Merck Collaboration: Growth-Accelerating Partnership



¹ Merck has committed to provide R&D reimbursement of up to \$50 million per year. If our R&D expenses exceed \$50 million in a given year, Merck can either reimburse up to an additional \$25 million for use in funding IND-enabling or later-staged activities or provide us with the equivalent value in in-kind services for such activities.

3Q19 Financial Results¹

STATEMENT OF OPERATIONS (In thousands, unaudited)	THREE MONTHS ENDED SEP 30, 2019	NINE MONTHS ENDED SEP 30, 2019
RELATED PARTY REVENUE	\$21,568	\$72,461
RESEARCH AND DEVELOPMENT EXPENSES	\$28,953	\$87,299
GENERAL AND ADMINISTRATIVE EXPENSES	\$5,612	\$17,208
TOTAL OPERATING EXPENSES	\$34,565	\$104,507
LOSS FROM OPERATIONS	(\$10,917)	(\$26,854)
BALANCE SHEET	SEP 30, 2019 (unaudited)	DEC 31, 2018 (audited)
CASH, CASH EQUIVALENTS AND SHORT-TERM MARKETABLE SECURITIES	\$356.6M	\$206.6M

¹ See the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 for more complete financial information

Multiple Potential Value-Driving Catalysts in 2020

Product Candidate	Potential Indications	Targeted 2020 Milestones	Targeted Timing
ALDAFERMIN	NASH F2/F3	Phase 2 Cohort 4 biopsy data	1Q20 <input checked="" type="checkbox"/>
ALDAFERMIN	NASH F4	ALPINE 4 FPI	1H20
ALDAFERMIN	NASH F2/F3	ALPINE 2/3 topline data	1H21
NGM313 (MK-3655)	NASH F2/F3	Phase 2b FPI (Merck)	2H20
NGM120	Cancer/CACS	Phase 1a/1b FPI	1Q20 <input checked="" type="checkbox"/>
NGM217	Diabetes	Phase 1b/2a FPI	2H20
NGM621	Dry AMD/GA	Phase 1 safety & tolerability data	2H20
NGM621	Dry AMD/GA	Phase 2 FPI	2H20
NGM395	Metabolic	Phase 1 FPI	1H20

NASDAQ: NGM

**Novel Biology.
Powerful Medicines.
Transformative Impact.**