

Corporate Presentation

November 2023

Forward-Looking Statements

This presentation contains statements about our future expectations, plans and prospects that constitute forward-looking statements for purposes of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by these forward-looking statements as a result of various important factors, including risks relating to: both our and our collaborators' ability to successfully research, obtain regulatory approvals for, develop and commercialize products based upon our technologies; our ability to obtain and maintain proprietary protection for our technologies and product candidates; our reliance on third parties to manufacture our preclinical and clinical drug supplies; competitive pressures; our ability to obtain and maintain strategic collaborations; compliance with our in-license agreements; our ability to successfully execute on, and receive favorable results from, our proprietary drug development efforts; market acceptance of our drug candidates; retaining members of our senior management; and our ability to raise additional funds to finance our operations.

The forward-looking statements included in this presentation represent our views as of the date of this presentation. We anticipate that subsequent events and developments will cause our views to change. While we may elect to update these forward-looking statements in the future, we specifically disclaim any obligation to do so. These forward-looking statements should not be relied upon as representing our views as of any date subsequent to the date of this presentation.

For more information regarding risks and uncertainties that could affect the results of our operations or financial condition review our filings with the Securities and Exchange Commission (in particular, our most recent Annual Report on Form 10-K and any subsequently filed Quarterly Reports on Form 10-Q).



Investment Highlights

- Developing novel therapeutics for metabolic and endocrine diseases
 - o Multiple clinical programs demonstrate best-in-class efficacy data

Metabolic Disease Programs

- o VK2809: Novel, selective thyroid receptor-β agonist for NASH and lipid disorders
 - Phase 2b VOYAGE trial successfully achieved primary endpoint; histology data expected 1H24
- VK2735: Novel GLP-1/GIP dual agonist for obesity
 - Phase 2 VENTURE obesity study ongoing, fully enrolled; data expected 1H24
- o VK2735 Oral: GLP-1/GIP dual agonist for metabolic disorders
 - Phase 1 study ongoing; data expected 1Q24

Rare Disease Program

- o VK0214: Novel, selective thyroid receptor-β agonist for X-ALD
 - Phase 1b ongoing



Pipeline Overview

Development Programs	Indication	Stage of Development				Status
		Preclin	Phase 1	Phase 2	Phase 3	
VK2809 (TRβ agonist)	NASH					Phase 2b VOYAGE trial ongoing
VK2735 (Dual GLP-1/GIP agonist)	Obesity					Phase 2 VENTURE study ongoing
VK2735 Oral (Dual GLP-1/GIP agonist)	Metabolic disorders					Phase 1 ongoing
VK0214 (TRβ agonist)	X-ALD					Phase 1b ongoing

Potential data events expected over next 12 months

- o VK2809: VOYAGE Phase 2b biopsy results in NASH
- o VK2735: VENTURE Phase 2 obesity data
- o VK2735 Oral: Phase 1 data in healthy subjects
- VK0214: Topline data, Phase 1b study in X-linked adrenoleukodystrophy





VK2809: Selective Thyroid Receptor-β Agonist

NASH

Metabolic Disease Program: Selective Thyroid-β Agonists

Proprietary platform for small molecule thyroid hormone mimetics

- Highly tissue and receptor selective
- Produce potent lipid reductions in animals and humans
- Unique chemical scaffolds, expected wider safety window vs. other approaches

Biological profiles suggest potential benefit in multiple indications

- Large markets: NASH, hypercholesterolemia, dyslipidemia
- Rare diseases: X-linked adrenoleukodystrophy (X-ALD), other

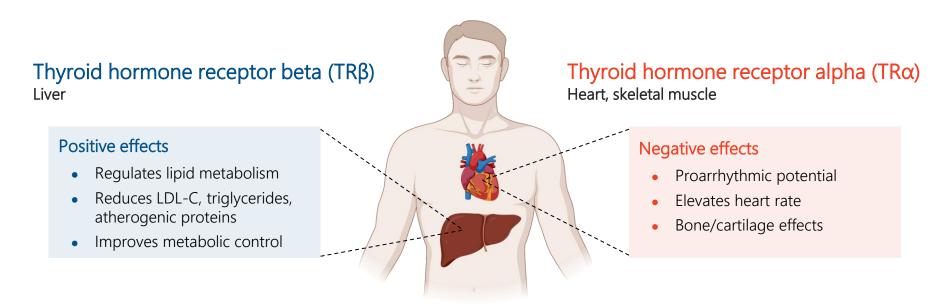
Lead program VK2809

- Oral formulation
- Shown to be safe and well-tolerated in 8 completed clinical studies
- Phase 2b VOYAGE trial ongoing



Thyroid Hormone Receptor Overview

Nuclear hormone receptors: 2 main types

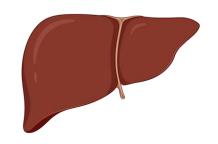


Therapeutic goal, lipid setting: Beta receptor selectivity, minimize alpha effects



Thyroid Receptor β Agonists for NAFLD and NASH

NASH Progression



Accumulation of fatty acids, triglycerides; NAFLD

Oxidative stress, inflammatory response

<u>NASH</u>: Steatosis, ballooning, hepatocyte damage



- β-Receptor: Key role in lipid metabolism; systemic and liver-specific effects
- Receptor localized to liver, limited ex-hepatic expression
- In vivo evidence suggests β -activation provides anti-fibrotic benefits
- Clinical data indicate correlation between reduced liver fat, improvement in NAS

An agent that reduces liver fat, improves systemic lipids, and antagonizes fibrotic signaling could provide multi-pronged benefits in NASH



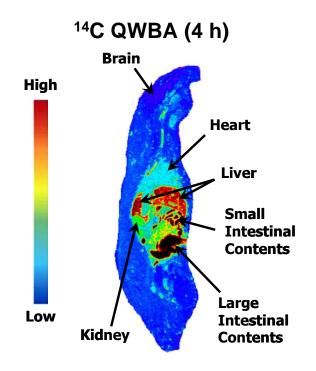
VK2809: Unique Liver-Targeted Characteristics

VK2809, Novel Prodrug

Following oral dosing:

- Cyp3A4-mediated cleavage of prodrug
- 3A4 is primarily expressed in liver
- Results in targeted delivery of drug to liver

VK2809A, Potent TRβ Agonist, 2.2 nM Ki

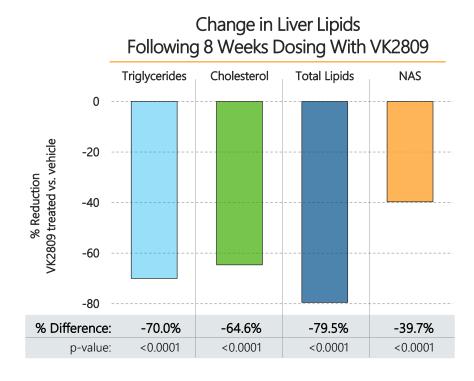


Selective activation, differentiated chemistry lends VK2809 liver selectivity; potentially minimizes risk of systemic effects



VK2809 Significantly Reduces Steatosis in Diet-Induced NASH

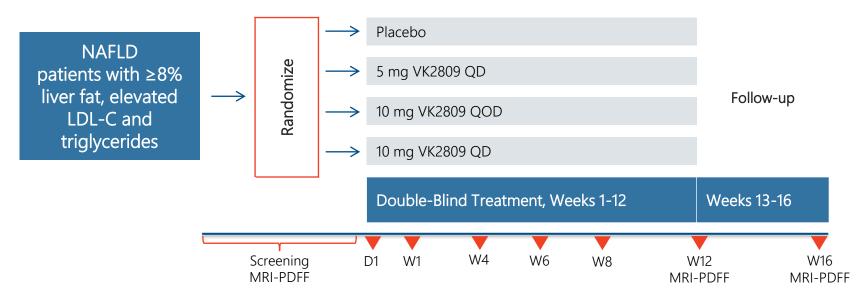
- Evaluation in biopsy-confirmed diet-induced NASH model
 - Rodent model designed to reflect progression of disease in humans
 - Animals biopsied pre-study; only those with NASH and fibrosis selected
 - VK2809 dosed once-daily for 8 weeks



Treatment with VK2809 significantly improves lipids, steatosis, NAS at 8 weeks; well-tolerated with no evidence of toxicity



VK2809-201: Phase 2a Study Design



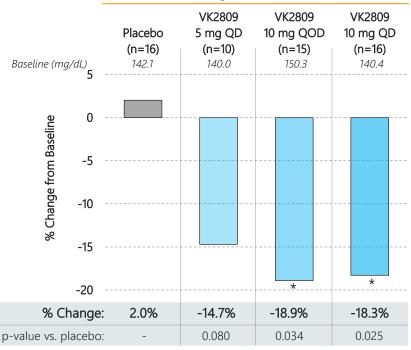
- Multi-arm, dose-ranging, 12 week Phase 2a trial
 - Primary endpoint: Change in LDL-C vs. placebo
 - Secondary endpoint: Change in liver fat by MRI-PDFF
 - Exploratory endpoints: Changes in atherogenic proteins



VK2809 Significantly Reduced LDL-C at 12 Weeks

- Statistically significant reductions in all VK2809 cohorts vs. baseline
- Placebo-adjusted change from baseline
 - 5 mg QD: -23.7 mg/dL
 - 10 mg QOD: -27.1 mg/dL
 - 10 mg QD: -28.3 mg/dL

Mean % Change in LDL-C at 12 Weeks



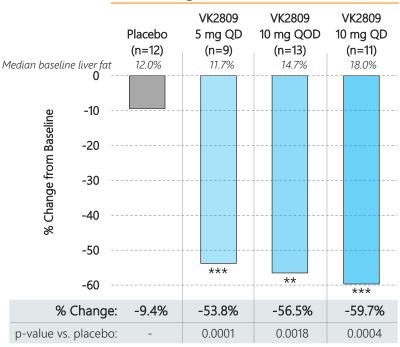
* p<0.05



VK2809 Produced Significant Relative Reductions in Liver Fat

- Significant relative reductions from baseline in liver fat by MRI-PDFF
- Maximal reductions at Week 12
 - o 5 mg QD: 78%
 - o 10 mg QOD: 72%
 - o 10 mg QD: 76%

Median Relative % Change in Liver Fat at 12 Weeks



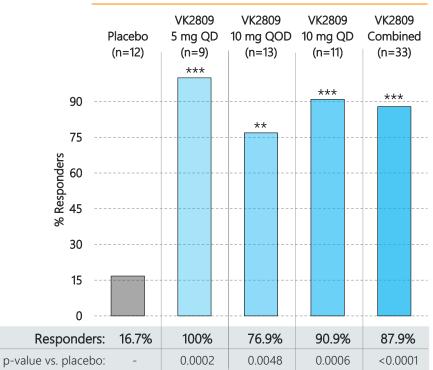
*p<0.05; **p<0.01; ***p<0.001



VK2809 Cohorts Demonstrated High Relative Response Rates

- Up to 100% of VK2809 patients experienced response, as defined by ≥30% decrease in liver fat at Week 12
- Combined VK2809 cohorts demonstrated 88% response rate
- 70% of all patients receiving VK2809 demonstrated liver fat reductions ≥50%
- Reduction in liver fat correlated with improved odds of long-term histology benefit¹

Patients with ≥30% Relative Reduction in Liver Fat at 12 Weeks



p<0.01; *p<0.001

VK2809-201: Encouraging Safety Profile Through 12 Weeks

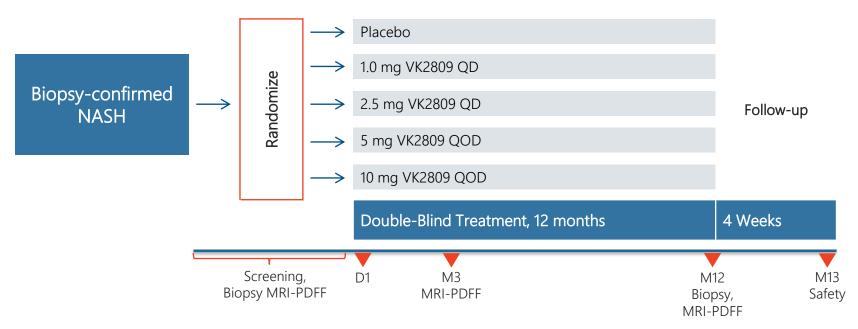
 Excellent tolerability 	GI and nausea events numerically lower vs. placebo
 No clinically meaningful changes in other key markers among VK2809- treated patients relative to placebo 	Thyroid hormones (fT4, tT3, TSH); Cardiovascular markers (troponin, CK-MB, NT proBNP); Vital signs (BP, heart rate, weight)
 No other liver function tests significantly different from placebo 	Direct bilirubin, indirect bilirubin, alkaline phosphatase, INR
 Mean ALT, AST levels in VK2809- treated subjects reduced relative to placebo at Week 12 	Patients with elevated baseline ALT demonstrated greater improvement relative to placebo at Weeks 12 and 16
 No SAEs observed 	No SAEs reported in completed clinical studies to date





VK2809: Phase 2b VOYAGE Study

VOYAGE Study: 12-Month Phase 2b Study of VK2809



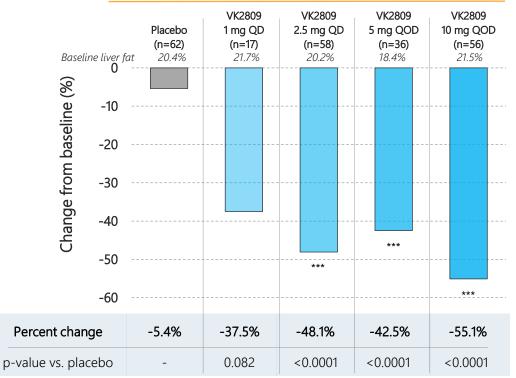
- Multi-arm, dose-ranging, 12-month Phase 2 trial
 - Primary endpoint: Change in MRI-PDFF vs. placebo at 3 months
 - Secondary endpoint: Change in histology at 12 months (NAS, fibrosis markers, etc.)



VOYAGE Study Achieves Primary Endpoint

- Significant liver fat reduction observed at 12 weeks
- Up to 55% median reduction
- Overall liver fat effect similar to 12 week NAFLD study

Median Relative % Change in Liver Fat at 12 Weeks



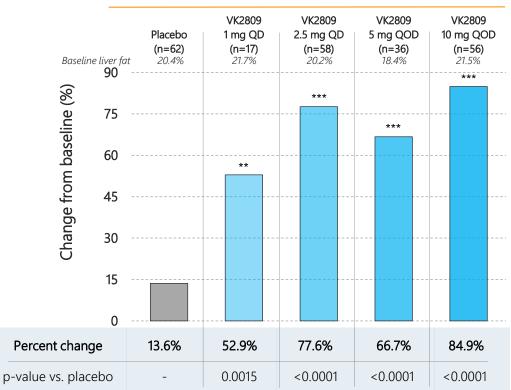




VK2809 Cohorts Demonstrate High Response Rates

- Up to 85% of VK2809 patients experienced response, as defined by ≥30% decrease in liver fat at Week 12
- Combined VK2809 cohorts demonstrated 75% response rate
- Reduction in liver fat correlated with improved odds of long-term histology benefit¹

Patients with ≥30% Relative Reduction in Liver Fat at 12 Weeks

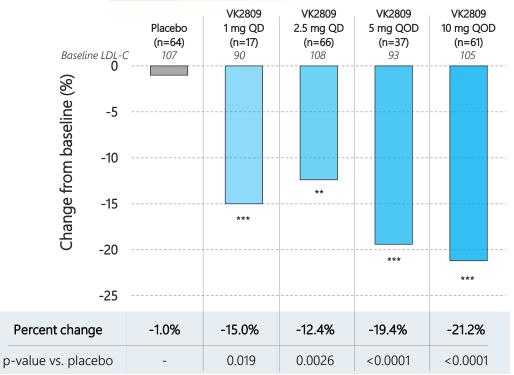


p<0.005; *p<0.0001

VOYAGE Study Results: Significant LDL-C Reduction

- Significant reductions in LDL-C observed at 12 weeks
- All cohorts demonstrated reductions
- Magnitude of effect similar to 12 week NAFLD study

Mean Relative % Change in LDL-C at 12 Weeks



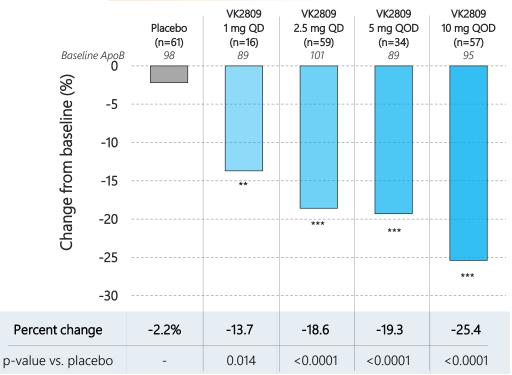




VOYAGE Study Results: Significant ApoB Reduction

- Significant reductions in ApoB observed at 12 weeks
- All cohorts demonstrated reductions
- Significant reductions also observed for triglycerides, Lp(a), Apo CIII

Mean Relative % Change in ApoB at 12 Weeks







VK2809 Demonstrates Consistent Safety, Tolerability Profile

Most common AEs to date Number of subjects reporting (%)	Placebo (n=65)	VK2809 1 mg QD (n=17)	VK2809 2.5 mg QD (n=66)	VK2809 5.0 mg QOD (n=37)	VK2809 10.0 mg QOD (n=61)	VK2809 Combined (n=181)
Treatment emergent adverse events, TEAEs	47 (72.3%)	14 (82.4%)	52 (78.8%)	29 (78.4%)	54 (88.5%)	149 (82.3%)
Drug-related TEAEs	22 (33.8%)	7 (41.2%)	13 (19.7%)	9 (24.3%)	23 (37.7%)	52 (28.7%)
TEAEs leading to discontinuation	5 (7.7%)	2 (11.8%)	1 (1.5%)	1 (2.7%)	5 (8.2%)	9 (5.0%)
Drug-related GI adverse events	12 (18.5%)	4 (23.5%)	3 (4.5%)	1 (2.7%)	7 (11.5%)	15 (8.3%)
Nausea	5 (7.7%)	2 (11.8%)	2 (3.0%)	1 (2.7%)	3 (4.9%)	8 (4.4%)
Diarrhea	2 (3.1%)	3 (17.6%)	2 (3.0%)	1 (2.7%)	3 (4.9%)	9 (5.0%)

Notes: Study safety population, defined as all patients who were randomized and received at least one dose of study drug. 1) Data as of March 13, 2023. 2) Deemed by investigator as possibly, probably, or definitely related to study drug.

- Majority of reported AEs (94%) mild or moderate
- Discontinuations due to AEs well balanced between placebo, treatment groups
- GI-related AEs similar to placebo



VK2809 VOYAGE Topline Takeaways

- Achieves primary endpoint demonstrating robust reduction in liver fat
- Up to 85% of patients achieve ≥30% liver fat reduction
- Significant reductions in plasma lipids LDL-C, triglycerides, Lp(a), ApoB, ApoC-III
- Excellent tolerability, rate of GI-related side effects similar to placebo
- Promising safety, 94% of AEs mild to moderate
- 52-Week biopsy results expected 1H24



VK2809 Competitive Advantages

- Currently >40 NASH programs in Phase 2 or Phase 3 development
- What differentiates VK2809 from the crowd?

o Orally available	Preferred route of administration for chronic therapy
Liver-targeted	Reduces risk of undesired effects in other tissues
o Potently reduces liver fat	Weight loss and reduced liver fat correlate with NASH resolution, improved fibrosis markers
 Reduces systemic lipids, may improve overall metabolic profile 	Bodes well for potential long-term CV benefit No elevations in other lipids that may require polypharmacy
 Well tolerated 	No GI impact, no pruritis or other tolerability issues to date





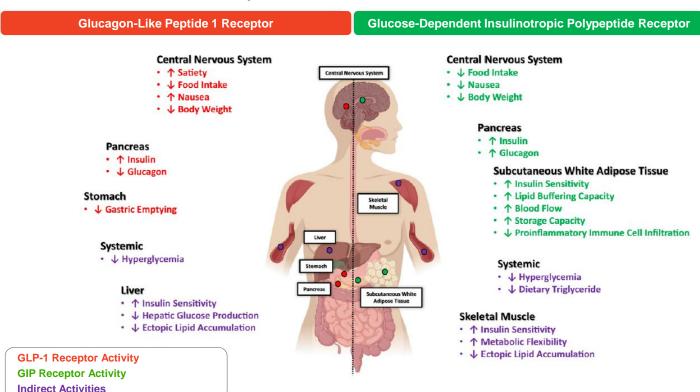
VK2735: Dual GLP-1/GIP Receptor Agonist

Metabolic Disorders

GLP-1/GIP Dual Agonists for Metabolic Disorders

- Peptides secreted by intestines after meals
- Complementary tissue distribution and activities
- Stimulate insulin production, induce satiety
- Therapeutic benefits in obesity, NASH, diabetes

GLP-1/GIP Receptor Co-Activation and Downstream Effects

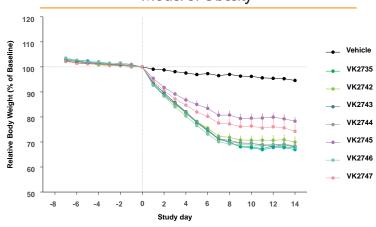




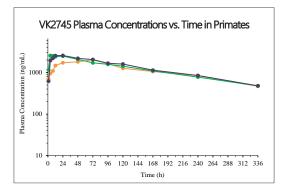
Novel Peptide-Based Dual Agonists

- Potent binding (<500nM) observed at human GLP-1 and GIP receptors
- Variable GIP activity
- Robust weight loss observed in rodent models
- Predictable PK; $T_{1/2}$ 2 7 days in primates; variable exposures
- VK2735 selected for further development

Relative Weight Change at 14 Days in Rodent Model of Obesity



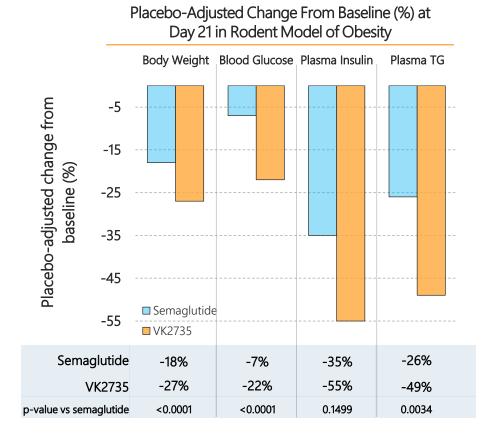
Representative PK profile: Generally wellbehaved with extended T_{1/2}





VK2735 Metabolic Effects Exceed GLP-1 Mono-Agonist Effects

- GLP-1 receptor activity similar to known agonist semaglutide (<300nM)
- VK2735 demonstrates broad improvements vs. GLP-1 monoagonism at same dose level
- Robust reduction in all relevant metabolic markers
- Data support additive benefit of GIP-agonist activity on top of GLP-1 activation





VK2735 Phase 1 Clinical Study Design

- Randomized, placebo-controlled, stacked SAD/MAD study design
- MAD: Weekly doses for 28 days
- Primary objectives: Safety, tolerability
- Exploratory: Body weight, glucose, liver fat



VK2735 Phase 1 SAD Results

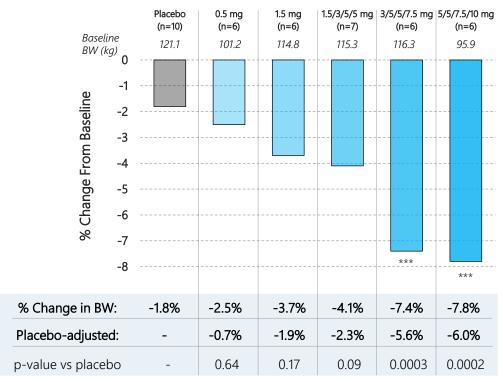
- All planned SAD cohorts were completed
 - o 0.25 mg, 0.5 mg. 1.0 mg, 2.5 mg, 5.0 mg, 7.5 mg
- PK profile: $T_{1/2}$ 170 250 hours, amenable to weekly dosing
- T_{max} 75 to 90 hours implies gradual onset of exposure
- Clinical observations
 - No SAEs reported
 - o Nausea reported, increasing with increased dose; expected on-mechanism effect
- No vomiting reported until top dose (7.5 mg); appears to be dose-limiting in SAD setting



VK2735 Phase 1 MAD Results: Weight Change After 28 Days

- Reduction in body weight observed in all VK2735 dosing cohorts
- Dose dependent effect observed across VK2735 cohorts
- Significant reduction vs. placebo observed at higher VK2735 doses

Mean % Change in Body Weight at Day 29



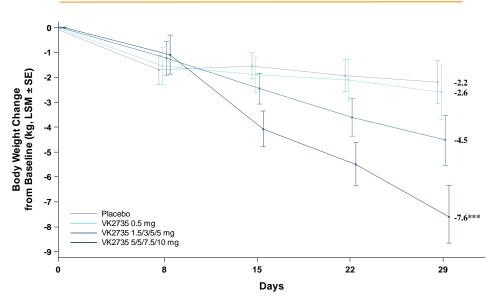
Notes: Baseline BMI ≥30 in all MAD subjects. ***p<0.001



VK2735 Phase 1 Results: Rapid, Progressive Weight Loss Observed

- Progressive weight loss observed in all VK2735 dosing cohorts
- Dose dependent effects observed
- No evidence of plateau in this dosing window

Change From Baseline Body Weight Over 28 Days



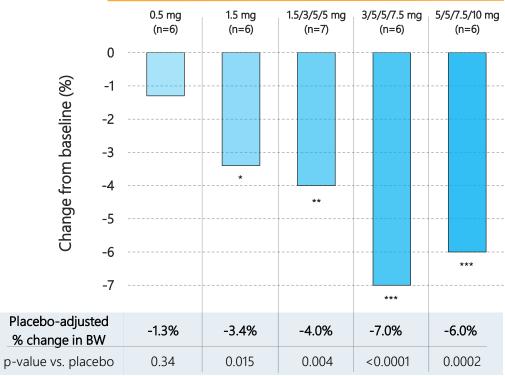
Notes: Baseline BMI ≥30 in all MAD subjects. ***p<0.001 Lowest, middle, and highest dose cohorts displayed.



VK2735 Phase 1 Results: Robust Weight Loss Maintained At 43 Days

- 21 days after last VK2735 dose
- Differences relative to placebo improve compared to Day 29 timepoint
- Suggests durable benefit following brief exposures

Placebo-Adjusted Change From Baseline Body Weight in Healthy Volunteers





Notes: All subjects in MAD study were required to have baseline BMI ≥ 30.

VK2735 Phase 1 MAD Study: GI Tolerability Summary

Most common AEs to date Number of subjects reporting (%)	Placebo (n=10)	0.5 mg (n=6)	1.5 mg (n=6)	1.5/3/5/5 mg (n=7)	3/5/5/7.5 mg (n=6)	5/5/7.5/10 mg (n=6)
GERD	0 (0%)	0 (0%)	0 (0%)	3 (43%)	2 (33%)	1 (17%)
Nausea	5 (50%)	2 (33%)	4 (67%)	5 (71%)	5 (83%)	2 (33%)
Vomiting	1 (10%)	2 (33%)	0 (0%)	2 (29%)	1 (17%)	1 (17%)
Abdominal pain	1 (10%)	0 (0%)	1 (17%)	3 (43%)	4 (67%)	2 (33%)
Diarrhea	3 (30%)	1 (17%)	1 (17%)	2 (29%)	0 (0%)	0 (0%)
Constipation	0 (0%)	1 (17%)	1 (17%)	2 (29%)	1 (17%)	0 (0%)

GERD: Gastroesophageal reflux disease.

- Majority of all reported AEs (98%) mild or moderate
- Mechanism-based mild (89%) to moderate (11%) nausea observed
- No discontinuations related to GI adverse events



VK2735-101 Safety Summary, MAD Cohorts

- Overall AEs: 83% mild, 15% moderate, 2% severe (anorexia, headache)
- 2 SAEs reported
 - o Acute, complicated choledocholithiasis requiring surgery gallbladder removal
 - o Infectious mononucleosis
- No consistent dose relationship observed for GI AEs
 - o Nausea overall 50% pbo vs. 58% Tx
 - o Vomiting overall 10% pbo vs. 19% Tx
 - o Diarrhea overall 30% pbo vs. 13% Tx

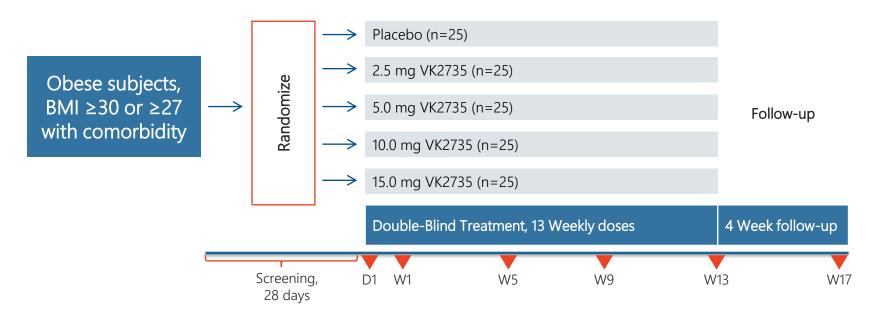


VK2735 Phase 1 Study Takeaways

- Encouraging early profile observed in healthy subjects with BMI ≥30
- Dose-dependent improvement in weight loss of up to 7.8% (6.0% placeboadjusted) reported after 28 days
- Durable weight loss maintained 21 days after last dose
- PK data suggest excellent exposures from weekly dosing regimen
- Promising safety and tolerability, 98% of AEs mild to moderate
- Expected observation of mild to moderate nausea appears manageable



VK2735 VENTURE Phase 2a Obesity Study Design



- Multicenter, parallel cohort, 13 week trial in obese subjects
 - 3 week titration blocks applied at doses ≥5 mg
- Primary endpoint: Percent change in body weight at Week 13 vs. placebo



VK2735 Next Steps

- Phase 2 VENTURE Study in obesity underway, data expected 1H24
- Novel oral tablet formulation demonstrates promising exposures in vivo
- Phase 1 study with oral formulation underway, data expected 1Q24





VK0214: Selective Thyroid Receptor-β Agonist

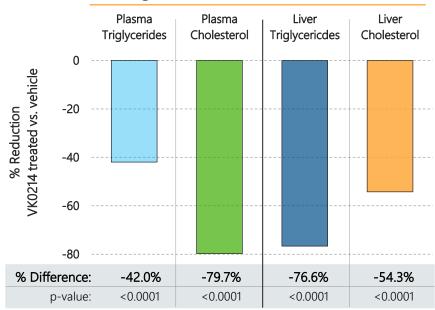
X-Linked Adrenoleukodystrophy

VK0214: Summary Profile

VK0214

- Potent small molecule thyroid receptor agonist
- 8 nM Ki at TRβ receptor
- >20:1 selective for β : α
- Oral formulation, once-daily dosing
- Robust lipid lowering effects in multiple models

Change in Lipids Following 12 Weeks of Dosing With VK0214; Rodent NASH model



Demonstrates in vitro and vivo efficacy comparable to VK2809



VK0214 for X-ALD

X-Linked adrenoleukodystrophy (X-ALD)

- Orphan neurodegenerative disorder
- X-linked: Carried by females, primarily manifesting in males

Most severe form: Cerebral ALD

- Rapidly progressive inflammatory demyelination; disruption of BBB
- Affects ~35% before age 12 (CCALD), ~20% between age 20 35 (CALD)
- Deterioration in speech, cognition; vegetative state within 3-5 years

Most common form: Adrenomyeloneuropathy (AMN)

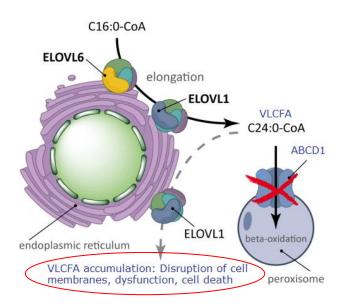
- Affects spinal cord, motor neurons
- Affects nearly all adult patients; considered "default" manifestation of ALD
- Progressive motor impairment; wheelchair confinement, leg paralysis common



TRβ and X-Linked Adrenoleukodystrophy

Caused by mutation in gene for the ATP-Binding Cassette transporter D1 (ABCD1)

Peroxisomal transporter of very long chain fatty acids (VLCFA)



ABCD1: Normal function to transport VLCFA into peroxisome for degradation

X-ALD: Defective ABCD1 leads to accumulation of VLCFA in tissues

High VLCFA levels disrupt cell membranes; inflammatory demyelination in brain tissue; motor neuron deterioration

TRβ Agonists: Stimulate expression of compensatory transporters ABCD2, 3; may mitigate VLCFA elevation



VK0214: In Vivo Proof-of-Concept Data, ABCD1 KO Mouse

- ABCD1 Knockout model: Mimics biochemical features of human X-ALD
- VK0214: Durable and progressive reductions in plasma VLCFAs
 - Tissue effects suggest encouraging CNS activity following long-term exposure

Reductions in Plasma VLCFA-LPC, ABCD1 Knockout Model

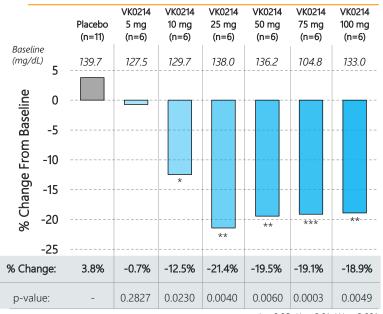




VK0214 Phase 1 Results: LDL-C Reduction Observed After 14 Days

- Reduction in LDL-C similar to observations with VK2809
- Initial effect observed @ ~10 mg
- Data to date indicate a ~20% reduction from baseline

Mean % Change in LDL-C at Day 14



*p<0.05; **p<0.01; ***p<0.001

Magnitude of LDL-C reductions are consistent with TRβ agonist mechanism

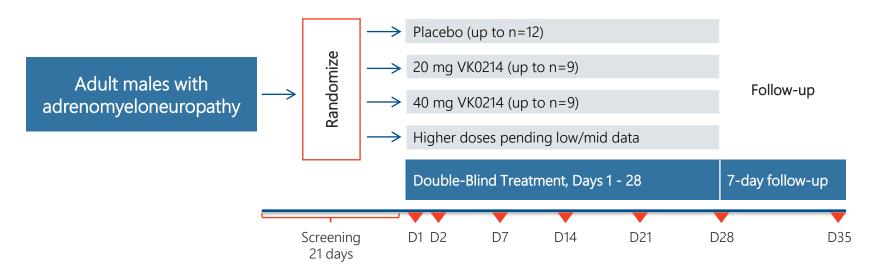


Takeaways From VK0214 Phase 1 SAD/MAD Study

- Encouraging overall safety and tolerability, no SAEs observed
- No meaningful impact to vital signs, cardiovascular parameters, thyroid axis
- Attractive PK profile; predictable exposures with once-daily dosing
- Preliminary lipid data suggest similar efficacy to VK2809
- Results support further study in adrenomyeloneuropathy (AMN) patients



VK0214 Phase 1b Study in Adrenomyeloneuropathy



- Multicenter, parallel cohort, 28-day Phase 1b trial in adrenomyeloneuropathy
 - Higher doses may be explored pending review of initial cohorts
- Safety, tolerability, change in VLCFAs in male patients with AMN



Upcoming Data Events

- NASH: Phase 2b VOYAGE primary endpoint results will be presented at the Late Breaking Poster Session at AASLD, November 10-14 (Abstract 48541)
- Phase 2b VOYAGE biopsy results expected in 1H24
- Obesity: Phase 2 VENTURE study results expected in 1H24
- Oral VK2735 Phase 1 results expected 1Q24



Financial Summary

• Capital structure and summary financials

Capital Structure ¹	In '000s
Shares outstanding	100,029
Options, RSUs	8,283
Total shares, options, RSUs, warrants	108,312

Financials	Sep 30, 2023 (\$'000s)
Cash burn YTD	\$62,673
Cash and ST Investments	\$376,241
Notes: 1) As of September 30, 2023	



Investment Highlights

- Developing novel therapeutics for metabolic and endocrine diseases
 - o Multiple clinical programs demonstrate best-in-class efficacy data

Metabolic Disease Programs

- o VK2809: Novel, selective thyroid receptor-β agonist for NASH and lipid disorders
 - Phase 2b VOYAGE trial successfully achieved primary endpoint; histology data expected 1H24
- VK2735: Novel GLP-1/GIP dual agonist for obesity
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