UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): September 22, 2023

NEUROBO PHARMACEUTICALS, INC.

(Exact name of Registrant as Specified in Its Charter)

Delaware	001-37809	47-2389984
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

545 Concord Avenue, Suite 210
Cambridge, Massachusetts 02138
(Address of principal executive offices, including Zip Code)

Registrant's Telephone Number, Including Area Code: (857) 702-9600

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.001 per share	**NRBO**	**The Nasdaq Stock Market LLC**

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 7.01. Regulation FD Disclosure.

On September 22, 2023, NeuroBo Pharmaceuticals, Inc. (the "***Company***") posted an updated corporate presentation to its website at https://www.neurobopharma.com/events-presentations/presentations, which the Company may use from time to time in communications or conferences. A copy of the corporate presentation is attached as Exhibit 99.1 to this Current Report on Form 8-K (this "***Report***").

The information in this Report, including Exhibit 99.1 hereto, is furnished pursuant to Item 7.01 and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "***Exchange Act***"), or otherwise subject to the liabilities of that Section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing. The Company's submission of this Report shall not be deemed an admission as to the materiality of any information required to be disclosed solely to satisfy the requirements of Regulation FD.

Exhibit 99.1 hereto contains forward-looking statements within the meaning of the federal securities laws. These forward-looking statements are based on current expectations and are not guarantees of future performance. Further, the forward-looking statements are subject to the limitations listed in Exhibit 99.1 and in the other reports of the Company filed with the Securities and Exchange Commission, including that actual events or results may differ materially from those in the forward-looking statements.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit Number	Exhibit Description
99.1	Corporate Presentation, dated September 2023
104	Cover Page Interactive Data File (embedded within Inline XBRL document).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

NEUROBO PHARMACEUTICALS, INC.

Date: September 22, 2023

By: /s/ Hyung Heon Kim
Hyung Heon Kim
President and Chief Executive Officer

NeuroBo PHARMACEUTICALS

NeuroBo Pharmaceuticals, Inc.

NASDAQ: NRBO

September 2023

Forward Looking Statements

This presentation may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include all statements that do not relate solely to historical or current facts and can be identified by the use of words such as "may,¯will," "expect," "project," "estimate," "anticipate," "plan," "believe," "potential," "should,¯continue,¯could," "intend," "target," "predict," or the negative versions of those words or other comparable words or expressions, although not all forward-looking statements contain these identifying words or expressions. Forward-looking statements are not guarantees of future actions or performance. These forward-looking statements include statements regarding the market size and potential growth opportunities of NeuroBo's current and future product candidates, capital requirements and use of proceeds, clinical development activities, the timeline for, and results of, clinical trials, regulatory submissions, and potential regulatory approval and commercialization of its current and future product candidates; executing on our commercial strategy, the realization of the benefits of the license agreement with Dong-A ST Co. Ltd., including the impact on future financial and operating results of NeuroBo; the cooperation of our contract manufacturers, clinical study partners and others involved in the development of our current and future product candidates; initiating and completing clinical trials on a timely basis; recruiting subjects for our clinical trials; receiving results from our clinical trials that are consistent with the results of pre-clinical and previous clinical trials ;costs related to the license agreement, known and unknown, including costs of any litigation or regulatory actions relating to the license agreement and applicable laws or regulations. These forward-looking statements are based on information currently available to NeuroBo and its current plans or expectations and are subject to a number of known and unknown uncertainties, risks and other important factors that may cause our actual results, performance or achievements expressed or implied by the forward-looking statements. These and other important factors are described in detail in the "Risk Factors" section of NeuroBo's Annual Report on Form 10-K for the year ended December 31, 2022, and NeuroBo's other filings with the Securities and Exchange Commission.

While we may elect to update such forward-looking statements at some point in the future, except as required by law, we disclaim any obligation to do so, even if subsequent events cause our views to change. Although we believe the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct. These forward-looking statements should not be relied upon as representing our views as of any date subsequent to this presentation.

This presentation also may contain estimates and other statistical data made by independent parties and by us relating to market size and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

Transformed Company: **Compelling** Investment Opportunity

NeuroBo PHARMACEUTICALS

- **Transformed Company Through Licensing of Next Generation Cardiometabolic Assets Targeting Large NASH and Obesity Markets**
- **Well Capitalized Into 2024 ($28.9 million as of June 30, 2023)**
- **Multiple Near-Term Value Creating Milestones to Drive Shareholder Value**

Company is Reborn November 2022

- Licensed DA-1241 (GPR119) and DA-1726 (GLP1R/GCGR)
- New focus: NASH and obesity

Dong-A is a Robust Partner

- Invested $15 million
- Largest shareholder
- NeuroBo has access to R&D, scientific, CMC expertise

Executing on Milestones

- IND for DA-1241 Phase 2 filed and cleared by FDA

Value Drivers in 2023

- Initiation of DA-1241 Phase 2a clinical study
- IND for DA-1726

Committed Partner Provides Financial and R&D Support

Our strategic partner and largest shareholder, Dong-A ST Co. Ltd., is part of Dong-A Socio Group of companies established in 1932 and based in South Korea. The company has the full support of Dong-A ST's R&D resources and Research Center which was established in 1977 as the first pharmaceutical research center in Korea.

Dong-A Socio Group
Revenue: $1.8B in 2022

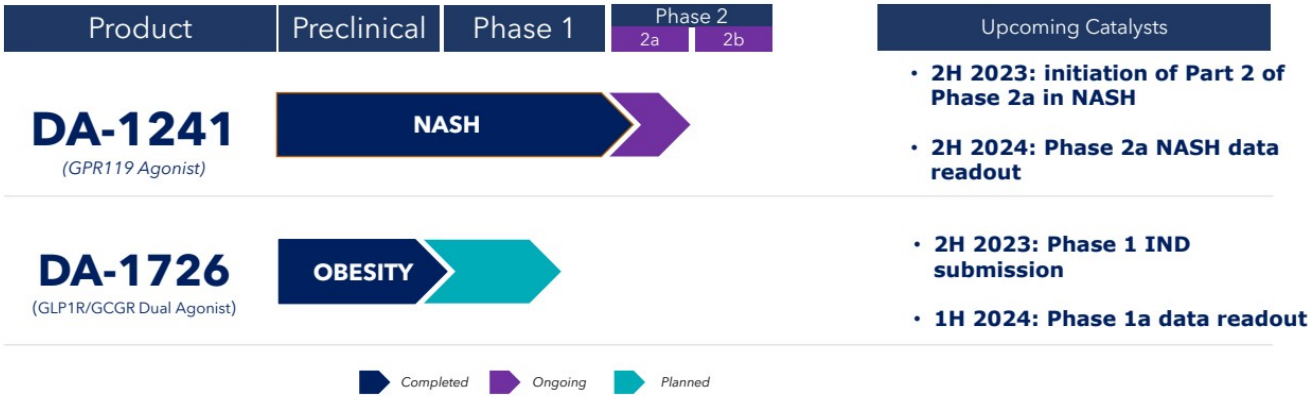
Dong-A Socio Holdings has been the leading pharmaceutical company in South Korea with its business focus in developing, manufacturing and distributing innovative products for the healthier life of their society.

Dong-A ST
Revenue $470M in 2022

Dong-A ST Co., Ltd. develops, manufactures, and markets pharmaceutical products and medical devices worldwide. It offers various ethical drugs, including Stillen for the treatment of gastritis; Zydena for erectile dysfunction treatment; Motilitone for use in functional dyspepsia treatment; Sivextro an oxazolidinone class antibiotic; and Suganon for diabetes treatment.

Focused on Chronic Liver and Related Metabolic Diseases

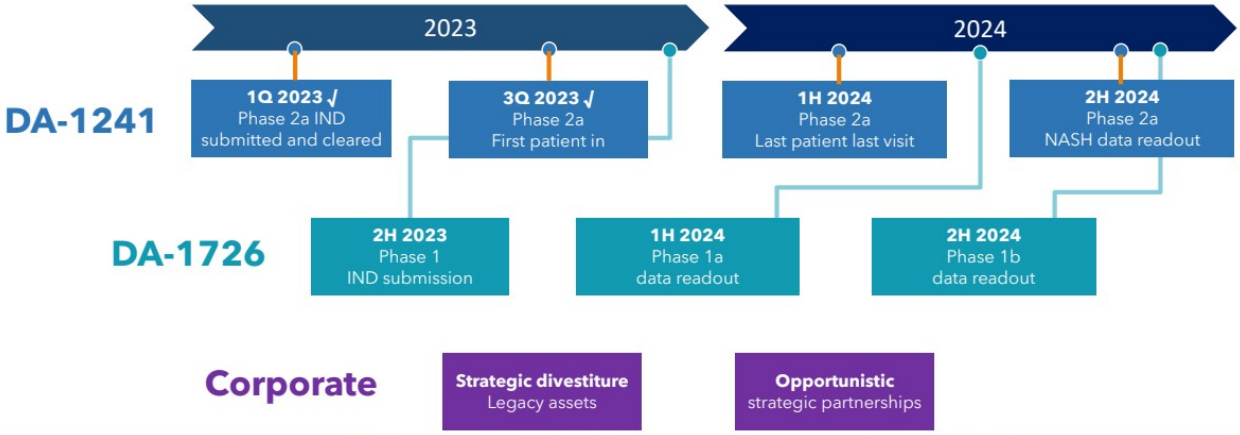
NeuroBo PHARMACEUTICALS



Multiple Near-Term Milestones: Driving Shareholder Value

NeuroBo PHARMACEUTICALS

Investments in the current DA-1241 Phase 2a and planned DA-1726 Phase 1 have the potential for outsized returns in the event of clinical success



The dates listed above are indicative only and are subject to receipt of FDA approval and enrollment into clinical trials, and delays of which may result in changes to the timing of the milestones set forth above.

NeuroBo PHARMACEUTICALS

DA-1241

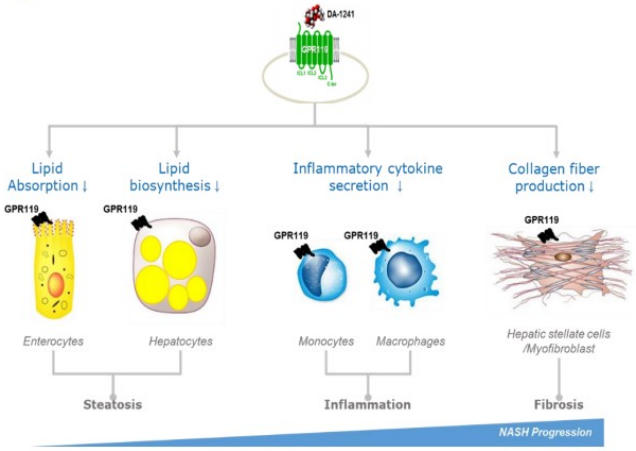
Orally Available, Potential First-in-Class **GPR119** Agonist for the Treatment of **NASH**

DA-1241: A Unique Mechanism of Action

NeuroBo PHARMACEUTICALS

DA-1241 is a novel chemical entity activating G protein-coupled receptor 119 (GPR119) with clinically confirmed glucose-lowering activity & inflammation reduction

- **GPR119** activation in hepatocytes, macrophages, and hepatic stellate cells inhibits lipid accumulation, immune cell infiltration, and the production of collagen fibers in the liver, **directly ameliorating NASH pathophysiology such as steatosis, inflammation, and fibrosis**.[1,2]
- **DA-1241 effectively reduces BOTH hepatic and systemic inflammation in mice with NASH. (3)**
- **In T2D patients in the Phase 1b clinical trial, advanced clinical efficacy of DA-1241 monotherapy was successfully confirmed compared to previous GPR119 products which ceased development.**



Notes: GPR119 (G Protein-Coupled Receptor 119); NASH (Non-Alcoholic Steatohepatitis); GLP-1 (Glucagon-Like Peptide 1);

1. Dong-A Study Report 104458.
2. Park H et al. 80th Scientific Session of American Diabetes Association. 2020; Poster presentation 217-LB.
3. Park H et al. 80th Scientific Session of American Diabetes Association, 2020, Poster presentation 216-LB

DA-1241: Direct Effect on Innate Immune Cells Versus Current NASH Landscape

NeuroBo PHARMACEUTICALS

The Highlights of DA-1241's Anti-NASH Effects

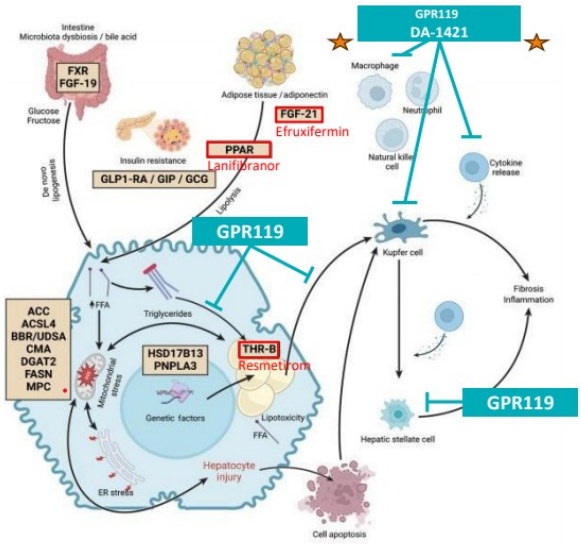
Hepatic effects

- Reduces immune cell infiltration into the liver by inhibiting immune cell activation and differentiation
- Reduces collagen fiber deposition by inhibiting hepatic stellate cell activation
- Reduces liver fat accumulation by inhibiting lipid biosynthesis

Extrahepatic effects

- Reduces fasted and postprandial glucose levels in humans
- Improve dyslipidemia (TG & LDL-C↓, HDL-C↑)
- Improve systemic inflammatory status such as TNFα, CCL2, CXCL1/2/10`

MoA of the main candidate drugs for NASH[1]



Notes: TG (triglycerides); LDL-C (low density lipoprotein cholesterol); HDL-C (high density lipoprotein cholesterol); TNF (tumor necrosis factor CCL (CC motif chemokine ligand); CXCL (C※C motif chemokine ligand); FGF (fibrosis growth factor); PPAR (peroxisome proliferator-activated receptor); THR-B (thyroid hormone receptor beta)

1. Adopted and modified from *Clinical Gastroenterology and Hepatology, 2023;21(8):2001-2014*

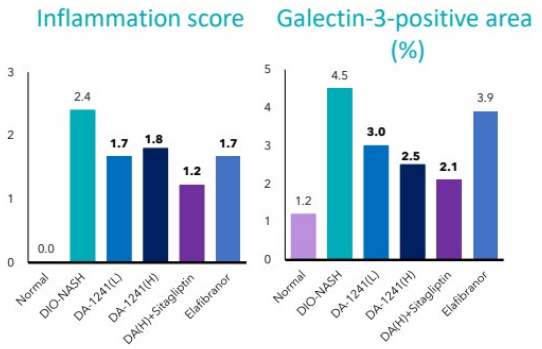
DA-1241: Differentiated Anti-Inflammatory Effect [1-3] in NASH Mice

NeuroBo PHARMACEUTICALS

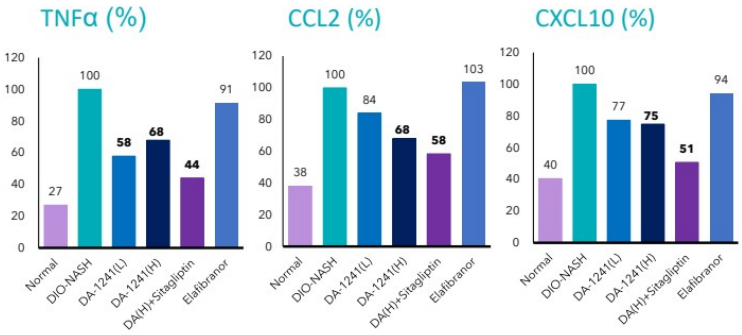
DA-1241 was shown to effectively improve BOTH hepatic and systemic inflammation

Combination with Sitagliptin potentiated the anti-inflammatory effect of DA-1241 monotherapy

Change in **Hepatic** Immune Cell Infiltration after 8-week treatment in DIO-NASH mice [1,3]



Change in **Plasma** Inflammatory Cytokine & Chemokines after 8-week treatment in DIO-NASH mice [2,3]



Notes: GPR119 (G Protein-Coupled Receptor 119); NASH (Non-Alcoholic Steatohepatitis); GLP-1 (Glucagon-Like Peptide 1); DA-1241 (L), 30 mg/kg/day; DA-1241 (H), 100 mg/kg/day; Elafibranor (PPARα/δ agonist with anti-inflammatory effects; discontinued in Phase 3 for NASH); Sitagliptin (JANUVIA™, approved DPP4 inhibitor for T2DM)

1. Dong-A Study Report 103420
2. Dong-A Study Report 104458.
3. Park H et al. 80th Scientific Session of American Diabetes Association, 2020, Poster presentation 216-LB

***Bold: p<0.05 vs. DIO-NASH**

DA-1241 Encouraging Pre-Clinical Findings

- DA-1241 has a ***higher intrinsic activity*** compared to preexisting GPR119 agonists and triggers ***unique balanced signaling*** paths. Therefore, DA-1241 shows an improved *in vivo* efficacy with sustained anti-diabetic effects
- DA-1241 improved ***steatosis, inflammation*** and ***fibrosis*** in various NASH mouse models
- The ***combined use of DA-1241 and a DPP4 inhibitor*** augmented the anti-NASH effect as well as anti-diabetic effect
- DA-1241 showed ***no noteworthy safety concerns*** in safety pharmacology and toxicology studies up to 26 & 39-week chronic dosing in rats and dogs

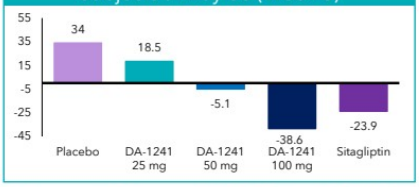
DA-1241 Clinical Proof-of-Concept Phase 1 (1-4)

NeuroBo PHARMACEUTICALS

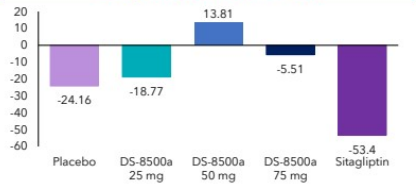
Confirmed enhanced efficacy of DA-1241: translation from non-clinical to clinical

	Clinical Outcomes
Study	▪ Phase 1a, First-In-Human, Double-Blind, Placebo-Controlled, Randomized, Single Ascending Dose and Interactions with Metformin Study (n=60) ▪ Phase Ib, Double-Blind, Placebo-Controlled, Randomized, Multiple Ascending Dose Study (n=108) ➢ Study treated 24 healthy volunteers for 28 days and 84 subjects with T2DM for 56 days
Safety/ PK	▪ Phase 1a, DA-1241 was **well tolerated at doses up to 400 mg in healthy volunteers** ▪ Phase 1b, DA-1241 was **well tolerated at doses up to 200 mg/d for 28 days in healthy males** and **100 mg/d for 56 days in T2DM subjects** ▪ **Once-daily oral administration of DA-1241 tablets** showed sufficient clinical exposure, increasing in a dose-dependent manner in T2DM subjects.
PD Results	▪ **DA-1241 was comparable to Sitagliptin (JANUVIA™) in post-prandial glucose reduction,** suggesting **higher clinical efficacy than DS-8500a** (Daiichi Sankyo's GPR119 agonist; failed in Phase2b) ▪ **Secretion of GIP, GLP-1 and PYY were increased at Day 56 in all DA-1241 treatment groups, consistent with the mechanism of action of DA-1241**

Change in Glucose $iAUE_{0\text{-}4h}$ in U.S. T2DM Subjects at Day 56 (Week 8)



Change in Glucose iAUE0-3h in U.S. T2DM Subjects at Week 12 (5)



Notes: T2DM (Type 2 Diabetes Mellitus); PK (Pharmacokinetics); PD (Pharmacodynamic); AE (Adverse Event); iAUE (incremental Area Under the Measurement Versus Time Curve); GLP-1 (Glucagon-Like Peptide 1); GIP (Glucose-Dependent Insulinotropic Peptide); PYY (Polypeptide YY).

1. Dong-A Study Report DA1241_DM_Ia.
2. Dong-A Study Report DA1241_DM_Ib.
3. Kim MK et al. 81st Meeting of the American Diabetes Association. 2021; Abstract 765-P.
4. Kim MK et al. 81st Meeting of the American Diabetes Association. 2021; Abstract 766-P.
5. 12-Week Study of DS-8500a in Subjects With Type 2 Diabetes Mellitus on Metformin (NCT02647320)

DA-1241: Ongoing Phase 2a in NASH

NeuroBo PHARMACEUTICALS

Rationale for **NASH study** as monotherapy	Rationale for **Combination with DPP4 inhibitor**
▪ DA-1241 ***alleviated progression of NASH*** in Ob-NASH mice on a high fat/fructose/CHO diet ▪ ***CCL2 and TIMP-1 and other biomarkers*** improved in both plasma and liver	▪ ***Reduced hepatic lipid and collagen deposition*** in the liver of NASH mice ▪ ***Effectively decreased hepatic inflammation*** ▪ ***Reduced systemic inflammation*** and fibrosis biomarkers

Study Design	
Study Overview:	▪ A multicenter, randomized, double-blind, placebo-controlled, parallel, Phase 2a clinical trial to evaluate the efficacy and safety of DA-1241 in subjects with presumed non-alcoholic steatohepatitis
Primary Endpoint:	▪ Change from baseline in alanine transaminase (ALT) levels at Week 16
No. of Subjects:	▪ A total of 87 subjects, with a planned maximum of 98 subjects to account for early discontinuations
Treatment Groups:	▪ 4 groups: DA-1241 50mg, DA-1241 100mg, DA-1241 100mg + Sitagliptin 100mg, Placebo
Location:	▪ Approximately 20 centers in the United States
Enrollment (planned):	▪ August 2023 ~ June 2024

Notes: FPFV (First Patient First Visit); LPO (Last Patient Last Visit)

DA-1241: Potential for Best-In-Class Efficacy

NeuroBo PHARMACEUTICALS

- **Novel, first-in-class GPR119 agonist for NASH**
- **Small molecule oral, once-daily administration**
- **Multimodal mechanism**
- **Proven preclinical anti-NASH effects**

Promising Preclinical Efficacy In NASH

- **Positive effects** in animals on hepatic steatosis, fibrogenesis/fibrosis, hepatic & systemic inflammation, and NASH progression
- Promise in multiple co-morbidities: **NASH, T2DM, dyslipidemia**
- **Decreased risk** of hypoglycemia

GPR119 **Agonism** Has Positive Effect On

- **Release of key peptides GLP-1, GIP, and PYY**, which play a role in glucose & lipid metabolism, and weight loss
- **Reduction of lipids**, **collagen deposition**, and **stellate cell activation**
- **Beneficial effects** on blood glucose levels, as well as pro-inflammatory cytokines & chemokines
- Reversion of hepatic transcriptome **toward normal control**

DA-1241: Competitive Analysis

NeuroBo PHARMACEUTICALS

	Resmetirom	DA-1241
Developer	Madrigal	**NeuroBo**
Indication	NASH	**NASH**
Status	**Phase 3 completion** NDA Submitted	**Phase 2a IND approval**
Action	THR(Thyroid hormone receptor) β agonist	**GPR119 agonist**
Dosage	once daily, oral	**once daily, oral**
Efficacy in Human	[1] NASH resolution with more than a 2-point reduction in NAS (100mg: 30%, 80mg: 26%, Placebo: 10%)	**To explore efficacy for NASH in Phase 2a. Confirmed comparable efficacy to Sitagliptin in Phase 1b for T2D, suggesting higher efficacy than DS-8500a.**
Safety in Human	[1] mild/transient diarrhea, mild nausea	**To explore safety for NASH in Phase 2a**
Differentiation	If approved by the NDA, the first treatment for NASH	**Concomitant control of hyperglycemia**

Notes:
1. https://ir.madrigalpharma.com/news-releases/news-release-details/madrigal-announces-positive-topline-results-pivotal-phase-3

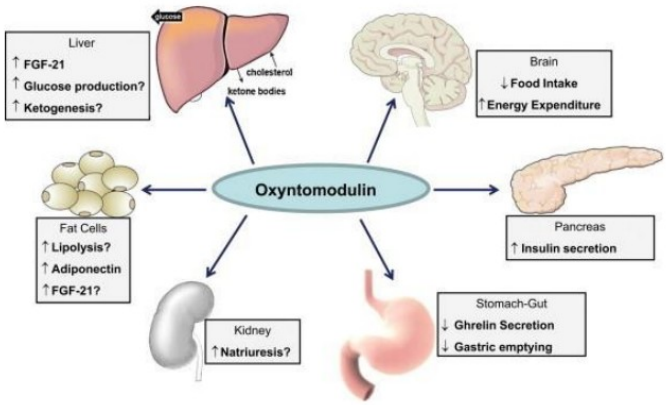
NeuroBo PHARMACEUTICALS

DA-1726

A Novel **GLP1R/GCGR** Dual Agonist
for the Treatment of **Obesity**

DA-1726 is a novel oxyntomodulin analogue functioning as a GLP1R/GCGR dual agonist for the treatment of Obesity

- Oxyntomodulin is a gut hormone released from intestinal L-cells after meal ingestion and represents dual agonism of the GLP-1 receptor and glucagon receptor
- DA-1726 **reduces food intake (GLP-1 R)** and **increases energy expenditure (GCGR)** in humans, potentially resulting in superior body weight lowering
- DA-1726 is well balance to have **low risk for hyperglycemia**
  - While activation of GCGR increases glucose production posing a hyperglycemic risk, the simultaneous activation of GLP-1 receptor counteracts this effect



Physiological effects of oxyntomodulin [1]

Notes: GLP1R/GCGR (Glucagon-Like Peptide 1 Receptor/ Glucagon Receptor); NASH (Non-Alcoholic Steatohepatitis); T2DM (Type 2 Diabetes Mellitus); OXM (Oxyntomodulin); GLP-1 (Glucagon-Like Peptide 1).

1. Pocai A. Mol Metab.2014;3:241-51.

DA-1726: Mechanism of Action of Body Weight Loss [1,2]

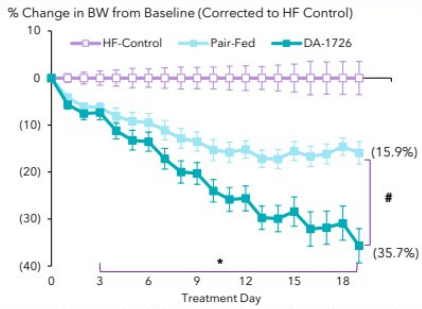
NeuroBo PHARMACEUTICALS

- DA-1726 was superior to the pair-fed group in the body weight loss, indicating that **reduced food intake** via activating GLP-1 receptor and **increase in energy expenditure**, which is secondary to glucagon activation

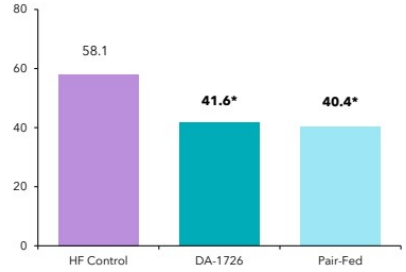
- Animals: male HF-DIO obese mice
- Regimen: Every three days S.C. injection
- DA-1726 Dose: 125 nmol/kg

* Statistically significant compared to control # Statistically significant compared to either treatment

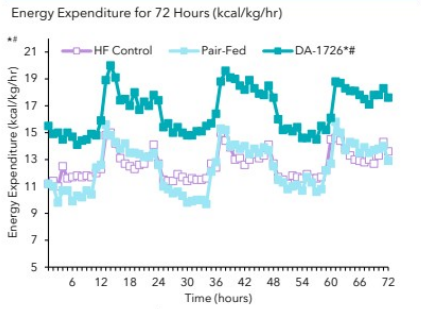
BWL in Obese Mice



Cumulative Food Intake



Energy Expenditure



Mean energy expenditure:
DA-1726*# 16.6 kcal/kg/hr
Pair-Fed 12.4 kcal/kg/hr
HF Control 12.6 kcal/kg/hr

Notes: HF-DIO (High Fat-Diet Induced Obesity); GLP-1 (Glucagon-Like Peptide 1); S.C. (Subcutaneous); HFD (High Fat Diet).

1. Dong-A Study Report 104372.
2. Kim TH et al. 82nd Meeting of the American Diabetes Association. 2022; Abstract 1403-P.

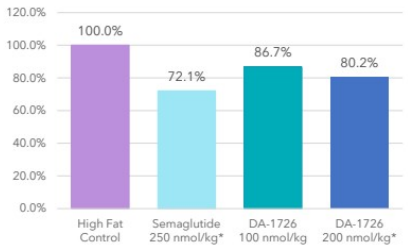
DA-1726 :Therapeutic Potential in Obesity [1-3] – Semaglutide Comparison

NeuroBo PHARMACEUTICALS

DA-1726 out-performed Semaglutide (WEGOVY™), a GLP-1 agonist, in mouse models of obesity

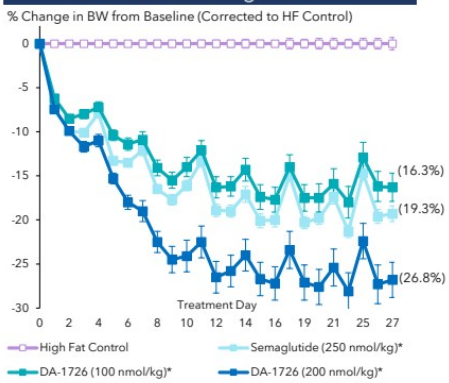
*Statistically significant compared to control

Cumulative Food intake in HF-DIO Obese Mice DA-1726 vs Semaglutide [1,3]

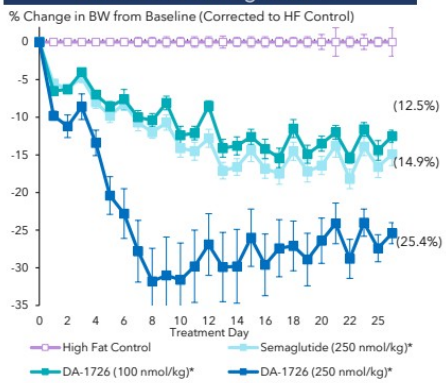


Weight loss observed from DA-1726 is attributed to reduced food intake via GLP1R and increased energy expenditure via the GCGR

BWL in HF-DIO Obese Mice DA-1726 vs Semaglutide [1,3]



BWL in HF-FATZO T2DM/Obese Mice DA-1726 vs Semaglutide [2,3]



Notes: GLP1R/GCGR (Glucagon-Like Peptide 1 Receptor/ Glucagon Receptor); HF-DIO (High Fat-Diet Induced Obesity); GLP-1 (Glucagon-Like Peptide 1).

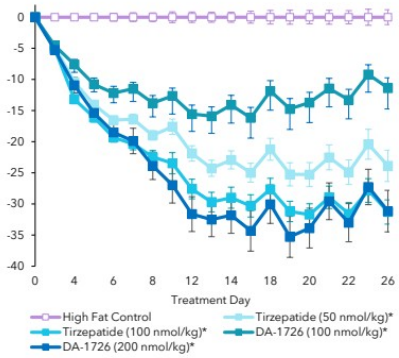
1. Dong-A Study Report 104561. All treatments given as twice weekly injections.
2. Dong-A Study Report 104455. All treatments given every 3 days as injections.
3. Kim TH et al. 82nd Meeting of the American Diabetes Association. 2022; Abstract 1403-P.

DA-1726: Therapeutic Potential in Obesity [1,2] – Tirzepatide Comparison

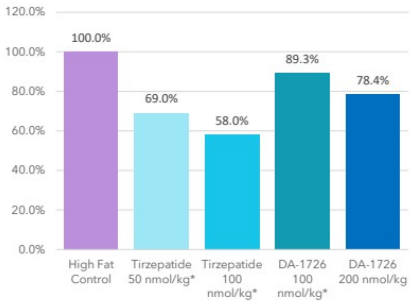
NeuroBo PHARMACEUTICALS

DA-1726 shows similar efficacy while consuming more food compared to Tirzepatide (Mounjaro™) in mouse models of obesity and more effective in improving plasma metabolic parameters

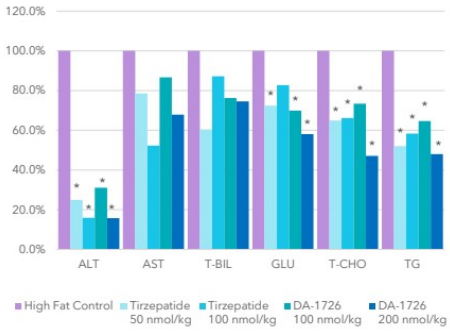
BWL in HF-DIO Obese Mice DA-1726 vs Tirzepatide [1,2]



Cumulative Food intake in HF-DIO Obese Mice DA-1726 vs Tirzepatide [1,2]



Plasma Biochemistry Analysis DA-1726 vs Tirzepatide [1,2]



Notes: HF-DIO (High Fat-Diet Induced Obesity); BWL (Body Weight Loss)

1. Dong-A Study Report 105497. . All treatments given as twice weekly injections.
2. Jung I-H et al. 83rd Meeting of the American Diabetes Association. 2023; Abstract 1668-P.

DA-1726: Pre-Clinical Highlights

NeuroBo PHARMACEUTICALS

GLP1R/GCGR dual agonist for the treatment of Obesity

A novel oxyntomodulin analogue, once-weekly subcutaneous administration

- DA-1726 induces **balanced activation between GLP-1 and glucagon receptors**
- DA-1726 showed **reduced food intake via activating GLP-1** receptor as well as **energy expenditure via glucagon activation**
- In obese mouse, DA-1726 **lost more weight than Semaglutide**
- In obese mouse, DA-1726 **lost similar weight while consuming more food than Tirzepatide**
- Histopathology of DA-1726 showed further improvements in hepatic steatosis, inflammation, and fibrosis compared to Semaglutide
- Balanced activation of GLP-1 and glucagon receptors **potentially lowers the risk of hypoglycemia and hyperglycemia**

DA-1726 Planned Phase 1a to Evaluate PK/PD and Safety in **Obesity**

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Rationale for Obesity study

- In animal models DA-1726 had ***superior weight loss*** compared with pair-fed group , indicating much of weight loss was attributed to reduced food intake via activation of GLP-1
- DA-1726 was also ***superior to both the pair-fed and control groups*** in energy expenditure (secondary to glucagon activation)
- Potentially superior weight loss compared with ***Semaglutide***
- Potential for similar weight loss while consuming more food than ***Tirzepatide***

Phase I	
Study overview:	▪ 12-week SAD/MAD, PK/PD, safety and tolerability; extended dosing (12 weeks) in Phase 1b study with obese patients could provide an added clinical signal in obesity
Population:	▪ Phase 1a: healthy volunteers; Phase 1b mix of healthy volunteers and otherwise healthy obese
No. of Subjects:	▪ Approximately 100 subjects for both studies
Location:	▪ United States (consideration may be given to Australia)
Duration of Study:	▪ FPFV to topline results approximately 18 months (SAD & MAD combined)

Notes: MAD (Multiple Ascending Dose); SAD (Single Ascending Dose); PK (Pharmacokinetic); PD (Pharmacodynamic); FPFV (First Patient First Visit); LPLV (Last Patient Last Visit).

DA-1726: Competitive Differentiation

NeuroBo PHARMACEUTICALS

	Survodutide	Mazdutide	DA-1726	Semaglutide (Wegovy®)	Tirzepatide (Maunjaro®)
Developer	Boehringer Ingelheim	Innovent Biologics Lilly	NeuroBo	Novo Nordisk	Lilly
Indication	Obesity	Obesity	Obesity	Obesity	Obesity
Status	Phase 2 completed	Phase 3 (China) Phase 1 (USA)	Phase 1 IND in 2H 2023	Marketed	Phase 3 (Obesity) Marketed (T2D)
Action	glucagon/GLP-1 receptor dual agonist	glucagon/GLP-1 receptor dual agonist	GLP-1R(Glucagon-Like Peptide 1 receptor) & GCGR(Glucagon receptor) dual agonist	GLP-1R(Glucagon-like peptide-1 receptor) agonist	GLP-1R(Glucagon-like peptide-1 receptor) & GIPR(Glucose-dependent insulinotropic polypeptide receptor) dual agonist
Dosage	Survodutide 4.8mg, once weekly, injection	Mazdutide 9mg, once weekly, injection	To explore once weekly, injection in Phase 1	Semaglutide 2.4mg, once weekly, injection	Tirzepatide 15mg, once weekly, injection
Efficacy in Human	Body weight loss, 16.7% @ 46-week	Body weight loss, 15.4% @ 24-week (interim analysis)	To explore efficacy in Phase 1b	Body weight loss, 12.4% @ 68-week	Body weight loss, 20.1% @ 72-week
Safety in Human	nausea, vomiting, diarrhea, constipation, Treatment discontinuations due to AEs: 28.6%	nausea, diarrhea, vomiting, abdominal distension	To explore safety in Phase 1b	nausea, diarrhea, vomiting, constipation, abdominal pain	nausea, diarrhea, decreased appetite, vomiting, constipation
Differentiation	First-in-class for obesity, Not reached plateau at week 46	No discontinued treatment due to adverse events in interim analysis	Out-performed Semaglutide and similar efficacy to Tirzepatide in preclinical studies	In clinical preparation for 7.2 mg dose in obesity and T2D patients, In recruiting participants for NASH P3	Higher efficacy

NeuroBo
PHARMACEUTICALS

Corporate Overview

Broad Intellectual Property Portfolio

NeuroBo PHARMACEUTICALS

	DA-1241	DA-1726
U.S.	▪ One patent: both **composition of matter** and **process of making the composition** - Expected to expire in **2035*** ▪ One U.S. non-provisional patent application: both **composition of matter and use of the composition**	▪ One U.S. patent: both **composition of matter** and **use of the composition** - Expected to expire in **2038*** ▪ One U.S. non-provisional patent application: both **composition of matter and use of the composition** ▪ PCT application entered national phases in October 2022
OUS	▪ 17 patents: - Expected to expire between **2035 and 2039*** ▪ 14 patent applications: **composition of matter and/or use of the composition**	▪ 5 **composition of matter** patents: - Expected to expire between **2038 and 2040*** ▪ 8 patent applications: **composition of matter and/or use**

Strong Leadership Team

NeuroBo PHARMACEUTICALS

Management Team

Hyung Heon Kim, Chief Executive Officer

- 20+ years of experience in M&A, financing and corporate governance
- 10+ years of licensing, M&A and compliance with Dong-A Group
- Former General Counsel/SVP at Dong-A ST and Dong-A Socio Group
- BA Soonghsil University, JD Washington University School of Law

Mi-Kyung Kim, Ph.D, RPh, Chief Scientific Officer

- 25+ years in drug discovery research in Dong-A ST
- Specialized in diabetes, obesity, NASH, immune-mediated diseases
- Ph.D, RPh, College of Pharmacy, Ewha Womans University

Robert Homolka, SVP Clinical Operations

- 35+ years on the pharmaceutical and biotech development
- Sr. director of clinical operations in Adiso therapeutics
- Director of clinical operations in Shire/Takeda pharmaceuticals
- Director of experimental trial management in AstraZeneca

Sung-Jin Kim, Pharmacist, Director of Corporate Strategy

- 18+ years on pharmaceutical industry in Dong-A ST
- Team lead of corporate planning
- Study manager of clinical trials specialized in diabetes
- Manager of business development

Stephen Harrison, M.D., Consulting Medical Director

- Visiting Professor, Hepatology, Oxford University
- NASH/NAFLD clinical trials expert, ~300 peer reviewed publications
- MD University of Mississippi
- Col (ret.) USA, MC

Bennett Goldstein, Financial Advisor

- 35+ years of investment banking and C-Suite experience
- CFO of Pinetree Therapeutics, US Medical Innovations, Rotor Clip
- Investment Banking positions at Credit Suisse, Prudential Securities, Chase, Citi
- BA Harvard University, MBA Columbia University

Adam Perlish, CPA, Controller

- Bachelor's degree in accounting from the George Washington University and is a licensed CPA

Experienced Board of Directors

NeuroBo PHARMACEUTICALS

Andrew Koven - Chairman of the Board, Chair of Nominating and Corporate Governance Committee

- 35+ years of experience as C-suite executive, board member and general counsel for public and private pharmaceutical companies
- Lead Independent Director of Kala Pharmaceuticals, Inc.
- BA and LLB Dalhousie University, LLM Columbia University

D. Gordon Strickland - Chair of the Audit Committee

- 35+ years of experience as C-suite executive and board member with public and private companies
- Former Chairman at Ampex Corporation
- BA Yale, MBA Wharton School of Finance

Michael Salsbury – Chair of Compensation Committee

- 30+ years of experience as senior executive with public and private companies and private law practice
- Advisory Board for Olympusat, legal advisor to Current Health Inc. and Triage Technologies, Inc.
- BA Dartmouth College, J.D. and MBA University of Virginia

Hyung Heon Kim - NeuroBo President & CEO

- 20+ years of experience in M&A, financing and corporate governance
- 10+ years of licensing, M&A and compliance with Dong-A Group
- Former General Counsel/SVP at Dong-A ST and Dong-A Socio Group
- BA Soonghsil University, JD Washington University School of Law

Mark A. Glickman

- 30+ years of experience in the pharmaceutical and medical device industry
- Former Co-Chief Executive Officer, TherapeuticsMD
- BA State University of New York, MBA NYU Stern School of Business

Jason Groves

- 20+ years in executive management, at various levels
- Executive Vice President and General Counsel at Medifast Inc.
- U.S. Army Veteran; direct-commissioned Judge Advocate in U.S. Army's (JAG) Corps.
- BS Bethune-Cookman University, J.D. North Carolina Central University

Supported By Scientific Advisory Board

NeuroBo PHARMACEUTICALS

Scientific Advisory Board

Roy Freeman, MBChB

- Prof. of Neurology, Harvard Medical School
- Director, Center for Autonomic and Peripheral Nerve Disorders
- Boston, MA

Rohit Loomba, MD, MHSc

- University of California at San Diego
- Director, NAFLD Research Center, Director of Hepatology, Professor of Medicine, Vice Chief, Division of Gastroenterology
- San Diego, CA

Leigh Perreault, MD, FACE, FACP

- Associate Prof. of Medicine, Colorado University School of Medicine
- Division of Endocrinology, Metabolism and Diabetes
- Boulder, CO

Caroline Apovian, MD, FACP, FTOS, DABOM

- Associate Prof. of Medicine, Harvard Medical School
- Co-Director Center for Weight Management and Wellness Brigham and Women's Hospital
- Boston, MA

Financials and Capitalization Table

Financial Overview	As of June 30, 2023
Cash	$28.9 million
Debt	none

Capitalization as of June 30, 2023	Common Stock Equivalents
Common Stock	38,241,685
Warrants (WAEP $13.00)[1]	2,458,576
Options (WAEP $59.51)	40,272
Common Stock Shares Available for Issuance under Equity Incentive Plans	5,087,821
Fully Diluted	45,828,254

1. No ratchets, price resets or anti-dilution provisions. Presumes $0 exercise price for each warrant exchangeable for one share of common stock.

Compelling Investment Summary

NeuroBo PHARMACEUTICALS

Targeting **NASH and Obesity** With a Pipeline of **Next Generation** Therapeutics

- Driving Shareholder Value though **Multiple, Near-Term, Value Creating Milestones**
  - ✓ IND Submission for Phase 2a Trial of DA-1241 for the Treatment of NASH
  - ✓ Initiation of Phase 2a for DA-1241 in NASH
  - Submission of IND for DA-1726 in Obesity
- Backed by **Financial and Clinical Partner**, Dong-A ST
- Well Capitalized With **$28.9 million** in Cash at Q2 2023
- Exploring **Strategic Opportunities** to Out-License Legacy Assets

NeuroBo PHARMACEUTICALS

Thank You!

Investor Contact:

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Michael Miller
+1-917-633-6086
mmiller@rxir.com

NeuroBo PHARMACEUTICALS

Appendix

Opportunity and Challenge in NASH

NeuroBo PHARMACEUTICALS

- No FDA approved treatments for NASH
- Projected to grow to $160 billion by 2030(1)
- 60% increase in prevalence from 17 million to 27 million (2015-2030)(2)

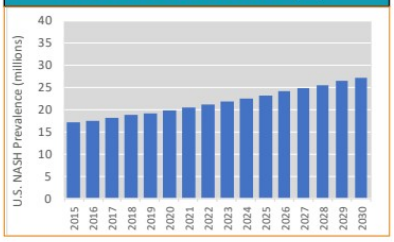
[Essential Requirement and Demand]

high level of safety and proven effectiveness

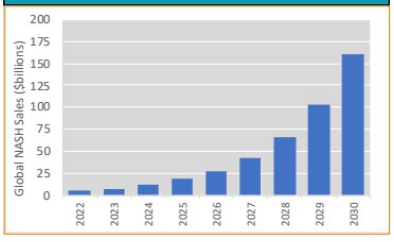
Select **NASH** Comparables in Phase 2(3)

Company	Drug	Target	Dev. Stage
Akero	Efruxifermin	FGF-21	Phase 2 ongoing
Altimmune	Pemvidutide	GLP-1	Phase 2b mid-2023
CytoDyn	Leronlimab	CCR5	Phase 2b planned
Galectin	Belapectin	Galectin-3	Phase 2b planned
NGM Pharm.	MK-3655	β-Klotho/FGFR1c	Phase 2b ended
Terns Pharm.	TERN-501	THRβ	Phase 2b/3 2024
Viking Therap.	VK2809	THRβ	Phase 2

NASH **Prevalence** 2015-2030(2) (est.)



GLOBAL NASH SALES 2022-2030(1) (est.)



SELECT **NASH** COMPANIES COMPARABLES Market Cap(3)

(1) https://www.globenewswire.com/news-release/2023/04/14/2647029/0/en/Global-Non-alcoholic-Steatohepatitis-NASH-Market-to-Reach-160-7-Billion-by-2030.html
(2) Hepatology, Loomba, Sanyal, 2018 Jan;67(1):123-133. doi: 10.1002/hep.29466. Epub 2017 Dec 1.
(3) NASDAQ, company websites & investor presentations

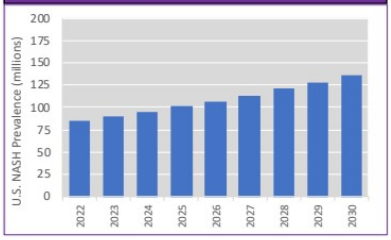
Tangible Universe of **Successful, Early-Stage** Comparables in Obesity

- Significant opportunity in obesity despite crowded landscape
- The obesity market is projected to grow to $54 billion by 2030[1]
- By 2030, 49% of U.S. adults are expected to be obese[2]

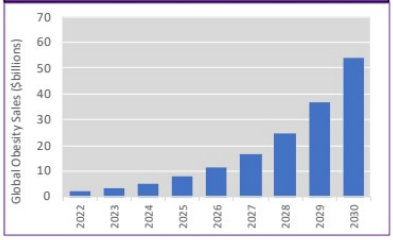
Select Obesity Comparables in Phase 2

Company	Drug	Target	Dev. Stage
Altimmune	Pemvidutide	GLP/GCGR	Phase 2
Hanmi Pharmaceuticals	Efinopegdutide	GLP/GCGR	Phase 2
Jiangsu Hansoh	Noliglutide	GLP1 analog	Phase 2
Rhythm	Setmelanotide	MC4R agonist	Phase 2
Viking	VK2735	GLP1/GIP (agonist)	Phase 1 completed
Zealand Pharma	ZP6590	GIPR	Preclinical

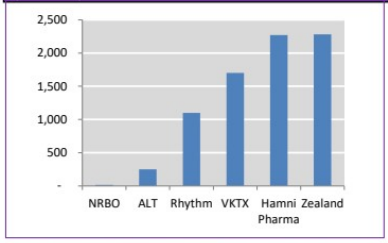
U.S. OBESITY PREVALENCE 2022-2030[2] (est.)



GLOBAL OBESITY SALES 2022-2030[1] (est.)



SELECT OBESITY COMPANY COMPARABLES Market Cap ($millioms)



(1) https://www.morganstanley.com/ideas/obesity-drugs-investment-opportunity, accessed 4/26/2023
(2) https://www.latimes.com/science/story/2019-12-18/nearly-half-of-us-adults-will-be-obese-by-2030, accessed 4/20/2023