SUBCUTANEOUS VK2735 STUDY IN ADULTS WITH OVERWEIGHT OR OBESITY AND TYPE 2 DIABETES: VANQUISH-2 BASELINE CHARACTERISTICS

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INTRODUCTION

- Approximately 90% of adults with type 2 diabetes (T2D) have overweight or obesity[1]
- Obesity and T2D are major drivers of chronic comorbidities, premature death, and health-care spending secondary to the increased risk of cardiovascular disease, liver disease, and renal disease
- The CDC's Diabetes Prevention Program notes that T2D disproportionately affects older adults and Hispanic/Latino and Black communities[2]
- Clinical guidelines (e.g., ADA, AACE) recommend achieving and maintaining weight reduction (e.g., >10%) as a primary therapeutic goal in adults with obesity and T2D to improve obesity-related complications[3,4]
- Glucagon-like peptide 1 (GLP-1)/glucose-dependent insulinotropic polypeptide (GIP) dual receptor agonists may potentiate the satiety and insulin-sensitizing effects of GLP-1 receptor activation, leading to enhanced clinical benefits[5]
- VK2735 is a long-acting dual agonist of the GLP-1/GIP receptors that has demonstrated significant weight reduction in the VENTURE Phase 2 study[6]
- The National Health and Nutrition Examination Survey (NHANES), funded by the National Center for Health Statistics (NCHS), part of the U.S. Centers for Disease Control and Prevention (CDC), provides nationally representative data on the health and nutritional characteristics of the U.S. civilian, noninstitutionalized population and provides a benchmark for contextualizing clinical trial populations within the broader U.S. population

OBJECTIVES

- Analyze preliminary baseline demographic data from the randomized population of the VANQUISH-2 study
- Compare the VANQUISH-2 enrolled study population to a generalizable U.S. patient population provided by NHANES

VANQUISH-2 ENROLLED A DIVERSE AND REPRESENTATIVE TYPE 2 DIABETES POPULATION

Baseline Demographics

- Mean age and gender were comparable between VANQUISH-2 and NHANES
- Mean BMI, weight, and waist circumference were modestly higher in VANQUISH-2
- VANQUISH-2 enrolled a diverse participant population, reflecting the demographics of the intended treatment population

Characteristic	VANQUISH-2 (N=1013)	NHANES
Age, mean (SD) years	58.3 (11.5)	59.51 (11.7)
≥65 years	31%	38%
Sex, F:M %	49:51	49:51
Weight, mean (SD) kg	105.3 (23.5)	99.8 (20.2)
Waist circumference, mean (SD) cm	118.2 (15.8)	116.4 (12.6)
BMI, mean (SD) kg/m^2	37.1 (7.1)	35.7 (6.2)
BMI category		
27 to <30	13%	22%
30 to <35	32%	34%
35 to <40	26%	22%
≥40	29%	22%

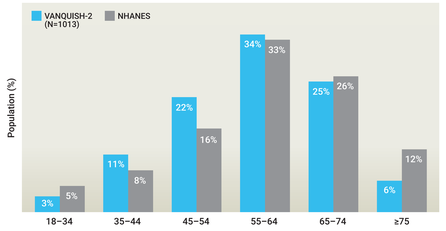
Abbreviations: BMI, body mass index; dx, diagnosis; GLP-1 RA, glucagon-like peptide-1 receptor agonist; T2D, type 2 diabetes.

Characteristic	VANQUISH-2 (N=1013)
Race/Ethnicity Distribution*	
Non-Hispanic White	43%
Hispanic/Latino	29%
Non-Hispanic Black	20%
Non-Hispanic Asian	4%
Other	3%
Prior exposure to GLP-1 RA**	21%
Time since T2D dx, mean (SD) years	10.3 (8.1)

Not all characteristics are captured in the NHANES database.
*NHANES race distribution: 57% Non-Hispanic White, 16% Non-Hispanic Black, 8% Other.
**GLP-1, GLP1/GIP, GLP-1/GLP/Glucagon receptor, CagriSema, or Amycretin used prior to enrolling in this study.

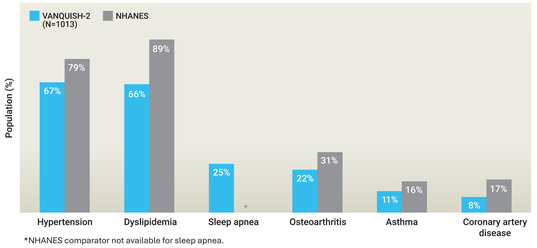
Age Distribution

- The age distribution of VANQUISH-2 participants was broad and generally consistent with the NHANES population



Baseline Obesity Complications

- VANQUISH-2 participants exhibited a broad range of obesity complications
- Prevalence of obesity complications was lower in VANQUISH-2 than the NHANES population



*NHANES comparator not available for sleep apnea.

METHODS

VANQUISH-2

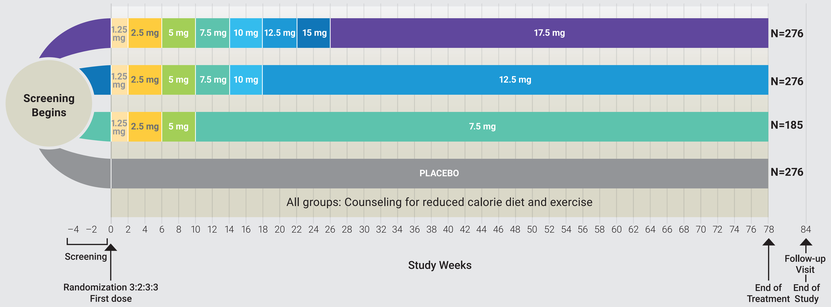
- Phase 3 study intended to evaluate the safety, tolerability, pharmacokinetics, and weight loss efficacy of subcutaneously administered VK2735 after 78 weeks of treatment
- Study completed enrollment in March 2026 of 1013 adults with BMI ≥27 kg/m^2 and T2D
- Primary endpoint is percent change in body weight from baseline to Week 78 versus placebo
- A diversity action plan (gender, race/ethnicity, age, socioeconomic status) was implemented to promote broad, inclusive participation to optimize study generalizability

NHANES Comparison Data

- The VANQUISH-2 eligibility criteria (age ≥18, BMI ≥27, physician-diagnosed diabetes) were applied to the 2021-2023 NHANES data set
- Applying these inclusion criteria to NHANES survey data returns an estimated weighted national sample between 18,872,346 and 20,329,948 adult patients in the U.S., which varies by parameter
- The NHANES survey is administered to a representative sample of thousands of individuals each cycle, not the entire population. These data are based on surveys from 607 people who met VANQUISH-2 inclusion criteria; 584 with positive phlebotomy weight
- NHANES uses complex, multistage probability sampling and sample weights provided by the NCHS/CDC to allow researchers to project sample findings onto the entire noninstitutionalized U.S. civilian population

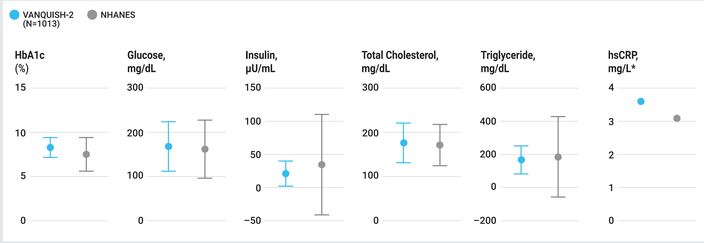
Study Design

- Phase 3, multicenter, randomized, double-blind, placebo-controlled, parallel arm study
- Treatment duration is 78 weeks, with a 6-week follow-up period
- 1013 participants were randomized from 127 U.S. study sites



Baseline Lab Values

- Laboratory parameters were generally consistent with those expected in this patient population



* All values are mean (SD) except hsCRP, for which median is given.
Abbreviations: HbA1c, hemoglobin A1c; hsCRP, high-sensitivity C-reactive protein.

CONCLUSIONS

- These preliminary baseline data indicate the VANQUISH-2 randomized population is largely representative of the adult U.S. population with BMI ≥27 kg/m^2 and T2D
- VANQUISH-2 will provide further VK2735 efficacy and safety data for this patient population
- Study participants represent a diverse, highly generalizable efficacy and safety population across a broad spectrum of age, gender, race/ethnicity, and obesity complications

REFERENCES

[1] Davies MJ, et al. *Diabetes Care*. 2022;45(11):2753-2786.
[2] Ng BP, et al. *J Diabetes Res*. 2024 Aug 13;2024:8461704.
[3] American Diabetes Association Professional Practice Committee. 2026. *Diabetes Care*. 2026;49(Suppl 1):S166–S182.
[4] Samson SL, et al. *Endocr Pract*. 2026;32(4):473-518.
[5] Douros JD, et al. *Front Endocrinol*. 2025;16: 1530985.
[6] Bays HE, et al. *Obesity* (Silver Spring). 2026 Mar;34(3):537-549.

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DISCLOSURES

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