Vibrance-3: Study Design and Methods for a Phase 2, Randomized, Placebo-Controlled, Parallel-Group Study Evaluating the Safety and Efficacy of ALKS 2680 in Patients With Idiopathic Hypersomnia

David Plante,¹ Ron Grunstein,² Giuseppe Plazzi,³ Kiran P. Maski,⁴ Jandira Ramos,⁵ Yangchun Du,⁵ Alexandra Lovett,⁵ Marcus Yountz,⁵ Bhaskar Rege⁵

¹University of Wisconsin School of Medicine and Public Health, Madison, WI, USA; ²Woolcock Institute of Medical Research, Macquarie University and Sydney Health Partners, Sydney, Australia; ³IRCCS Istituto delle Scienze Neurologiche di Bologna, Bologna, Italy; ⁴Department of Neurology, Boston Children's Hospital, Boston, MA, USA; ⁵Alkermes, Inc., Waltham, MA, USA **F**

Poster No: 538

INTRODUCTION

- Idiopathic hypersomnia (IH) is a central disorder of hypersomnolence characterized by excessive daytime sleepiness (EDS), with sleep inertia, long/unrefreshing naps, and prolonged nighttime sleep¹
- Orexin acts as a key regulator of wakefulness via activation of multiple downstream wake-promoting pathways²
- Targeting the orexin system may address EDS across hypersomnolence disorders with orexin deficiency (narcolepsy type 1 [NT1]) and without orexin deficiency (eg, narcolepsy type 2 [NT2], IH)³
- Unlike NT1, IH is not characterized by a loss of orexin-producing neurons or low endogenous central nervous system orexin levels
- ALKS 2680 is a highly potent, oral, and selective orexin 2 receptor agonist being developed as a once-daily treatment for narcolepsy and IH
- In a phase 1b study in patients with IH, single doses of ALKS 2680 at 5, 12, and 25 mg demonstrated statistically significant, clinically meaningful improvements in mean sleep latency, improved self-reported alertness on the Karolinska Sleepiness Scale, and were generally well tolerated^{4,5}
- The results of the phase 1b study demonstrated that ALKS 2680 may have clinical benefits for patients with IH and helped inform dose selection for the Vibrance-3 phase 2 study
 - ALKS 2680 is also being evaluated in patients with NT1 and NT2 in the phase 2 Vibrance-1 (NCT06358950) and Vibrance-2 (NCT06555783) studies, respectively

OBJECTIVE

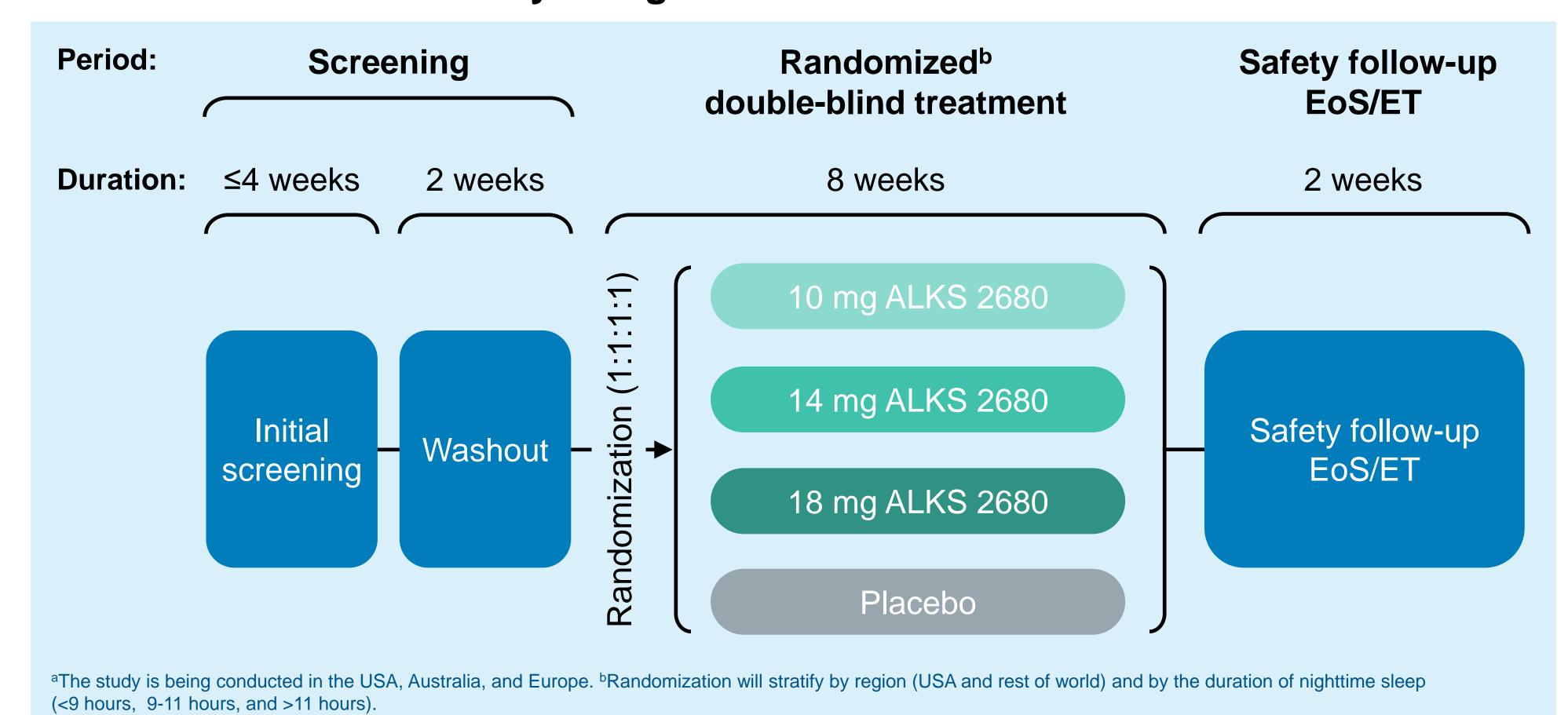
• The Vibrance-3 study (ClinicalTrials.gov identifier: NCT06843590)⁶ aims to assess the safety and efficacy of once-daily ALKS 2680 compared with placebo through 8 weeks of treatment in adults with IH

METHODS

STUDY DESIGN

- Vibrance-3 is a phase 2, randomized, double-blind, placebo-controlled, parallel-group, dose-range—finding study (Figure 1)⁶
- Following a 2-week washout period from current standard of care, patients will be randomized
 1:1:1:1 to receive placebo or ALKS 2680 once daily at doses of 10, 14, or 18 mg for 8 weeks
- Patients who complete Vibrance-3 may be eligible to roll over into a separate open-label, long-term extension study (NCT06767683)

FIGURE 1: Vibrance-3 Study Design^a



STUDY POPULATION

EoS = end of study; ET = early termination.

- Planned enrollment is approximately 96 patients with IH
- Key inclusion and exclusion criteria are described in Figure 2

FIGURE 2: Key Inclusion and Exclusion Criteria

Adults ≤70 years of age⁶

• BMI ≥18 and ≤40 kg/m²

- Meets the diagnostic criteria of IH according to ICSD-3-TR guidelines^{6,7}
- Has residual excessive daytime sleepiness (ESS score >12 at the end of the screening period)
- Able to discontinue any medications prescribed for the management of IH symptoms, as well as any medications that may impact sleep or wake, for the duration of the study

Exclusion Criteria^{6,a}

Inclusion

Criteria^{6,a}

Presence of other significant comorbid medical conditions, including other sleep, cardiovascular, and psychiatric disorders

^aAdditional criteria apply. Eligibility will be determined on an individual basis by the study investigator.

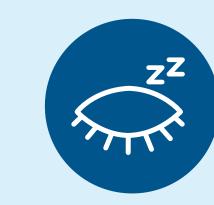
BMI = body mass index; ESS = Epworth Sleepiness Scale; ICSD-3-TR = International Classification of Sleep Disorders, Third Edition, Text Revision; IH = idiopathic hypersomnia.

STUDY ENDPOINTS

Primary, secondary, and exploratory endpoints are summarized in Figure 3

FIGURE 3: Study Endpoints

Primary Endpoint



Change in ESS from baseline to Week 86

Secondary Endpoints



Change in IHSS from baseline to Week 8⁶



Safety and tolerability parameters including TEAEs, clinical laboratory assessments, vital signs, ECG, and C-SSRS

Exploratory Endpoints



Clinician- and patient-reported outcomes, including:

- MWT
- CGI-S
- KSS
- PGI-S



Change in sleep stages as measured by EEG

CGI-S = Clinical Global Impression of Severity; C-SSRS = Columbia-Suicide Severity Rating Scale; ECG = electrocardiogram; EEG = electroencephalogram; ESS = Epworth Sleepiness Scale; IHSS = Idiopathic Hypersomnia Severity Scale; KSS = Karolinska Sleepiness Scale; MWT = Maintenance of Wakefulness Test; PGI-S = Patient Global Impression of Severity; TEAE = treatment-emergent adverse event.

SUMMARY

- Vibrance-3 is evaluating once-daily ALKS 2680 over 8 weeks in patients with IH
- To learn about participation or patient referrals for Vibrance-3, please visit vibrancestudies.com or ClinicalTrials.gov/study/NCT06843590



Visit vibrancestudies.com



Visit Vibrance-3 at ClinicalTrials.gov

Disclosures

DP has served as a consultant/advisory board member for Aditum Bio, LLC, Alkermes, Centessa, Harmony Biosciences, Jazz Pharmaceuticals, Takeda, and Teva Australia. **RG** has received funding from Apnimed, Eli Lilly & Company, and SomnoMed. Dr Grunstein's department has received funding from Alkermes, Eisai, Takeda, and Vanda Pharmaceuticals. **GP** has received funding from Bioprojet, Centessa Pharmaceuticals, Idorsia, Jazz Pharmaceuticals, Orexia Therapeutics, and Takeda. **KPM** has received grant funding from Harmony Biosciences and Jazz Pharmaceuticals, and has consulted for Alkermes, Avadel, Harmony Biosciences, Jazz Pharmaceuticals, Synchronicity Pharma, Takeda, Taysha Gene Therapies, and Zevra Pharmaceuticals. She has served as a co-principal investigator for a Takeda clinical trial, and as the Data Safety and Monitoring Board chair for Idorisa. She has received royalties from Uptodate, Inc. **JR**, **YD**, **AL**, **MY**, and **BR** are employees and shareholders of Alkermes.



References

1. Dauvilliers Y, et al. Sleep Med Rev. 2022;66:101709. 2. Jászberényi M, et al. Biomedicines. 2024;12(2):448. 3. Barateau L, Dauvilliers Y. Ther Adv Neurol Disord. 2019;12:1-12. 4. Yee B, et al. Poster presented at ASCS 2025 Meeting; February 14-17, 2025; Clearwater Beach, FL, USA. 5. Grunstein R, et al. Poster presented at SLEEP 2025 Meeting; June 8-11, 2025; Seattle, WA, USA. 6. Alkermes, Inc. A Study to Evaluate the Safety and Effectiveness of ALKS 2680 in Subjects with Idiopathic Hypersomnia (Vibrance-3). NCT06843590. https://clinicaltrials.gov/study/NCT06843590 (Accessed April 4, 2025). 7. American Academy of Sleep Medicine. International Classification of Sleep Disorders, Third Edition, Text Revision. 2023.

Acknowledgments

The study was supported by Alkermes, Inc. Medical writing support was provided by Ashley Oney, MD, at Envision Pharma Group, and was funded by Alkermes, Inc. This poster was developed in accordance with Good Publication Practice (GPP4) guidelines. Authors had full control of the content and made the final decision on all aspects of this poster.

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