Prophylactic Interventions for Oral Toxicities With the GPRC5D×CD3 Bispecific Antibody Talquetamab in Relapsed/Refractory Multiple Myeloma: An Update on the Open-Label, Phase 2, Randomized TALISMAN Study

Rakesh Popat[1], Alexa Laheji[2], Niels WCJ van de Donk[3], Richard L Doty[4], Jim Omel[5], Brea Lipe[6], Leo Rasche[7], Ajai Chari[8], Kelly Kato[9], Shaozhou Tian Ken[10], Deeksha Vishwamitra[10], Jacqueline Speier[10], Jennifer Schultz[11], Kasey Bolyard[9], Kathleen S Gray[12], Gloria Aguilar[13], Mariana Fernandez[14], Keqin Qi[11], Larysa Sanchez[15,*] (Larysa.Sanchez@mssm.edu)

*Presenting author.

[1]University College London Hospitals, NHS Foundation Trust, London, UK; [2]University of Amsterdam and Vrije Universiteit, Amsterdam, Netherlands, and Amsterdam University Medical Centers, University of Amsterdam, Amsterdam, Netherlands; [3]Amsterdam University Medical Center, Vrije Universiteit Amsterdam, Amsterdam, Netherlands; [4]University of Pennsylvania Smell and Taste Center, Philadelphia, PA, USA; [5]The Central Nebraska Myeloma Support Group, Grand Island, NE, USA; [6]University of Rochester Medical Center, Rochester, NY, USA; [7]University Hospital of Würzburg, Würzburg, Germany; [8]University of California, San Francisco, San Francisco, CA, USA; [9]Johnson & Johnson, Raritan, NJ, USA; [10]Johnson & Johnson, Spring House, PA, USA; [11]Johnson & Johnson, Titusville, NJ, USA; [12]Johnson & Johnson, Bridgewater, NJ, USA; [13]Johnson & Johnson, Leiden, Netherlands; [14]Johnson & Johnson, Madrid, Spain; [15]Icahn School of Medicine at Mount Sinai, New York, NY, USA

Current Status

TALISMAN opened for enrollment in August 2024

Conclusions

- TALISMAN is a randomized, multicenter, open-label, phase 2 study registered at ClinicalTrials.gov, NCT06500884
- TALISMAN will provide potential strategies to prevent, manage, and decrease the severity of Tal-related oral toxicities as well as needed data on taste-related assessment tools
- Results from TALISMAN will also elucidate the potential impact of toxicities on patient treatment experience with Tal

Please scan QR code

Supplementary material

https://www.congresshub.com/Oncology/AM2025/Talquetamab/Sanchez

Acknowledgments
We thank the patients who are participating in this study and their caregivers, the physicians and nurses who care for them, the staff at study sites, and the staff involved in data collection and analyses. This study was funded by Johnson & Johnson. Medical writing support was provided by Ashley Thoma, PharmD, of Eloquent Scientific Solutions, and funded by Johnson & Johnson.

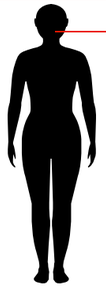
Disclosures
LS reports a consulting/advisory role for Johnson & Johnson; and has received honoraria from Johnson & Johnson.

Introduction

- Talquetamab (Tal), the first approved G protein–coupled receptor class C group 5 member D (GPRC5D)-targeting bispecific antibody for relapsed/refractory multiple myeloma (RRMM), demonstrated high overall response rates (ORRs) and durable responses in the MonumenTAL-1 study (NCT03399799/NCT04634552)[1-4]
- Oral toxicities, including dysgeusia, are common adverse events (AEs) with Tal and may impact patient quality of life[5] (**Figure 1**)
- We provide an update on the TALISMAN study, which investigates prophylactic interventions for oral toxicities using objective and patient-derived assessment tools[6]

TALISMAN will help measure taste changes and implement mitigation strategies in future studies of patients with multiple myeloma

Figure 1. Oral on-target, off-tumor AEs associated with GPRC5D-targeting therapies, including Tal



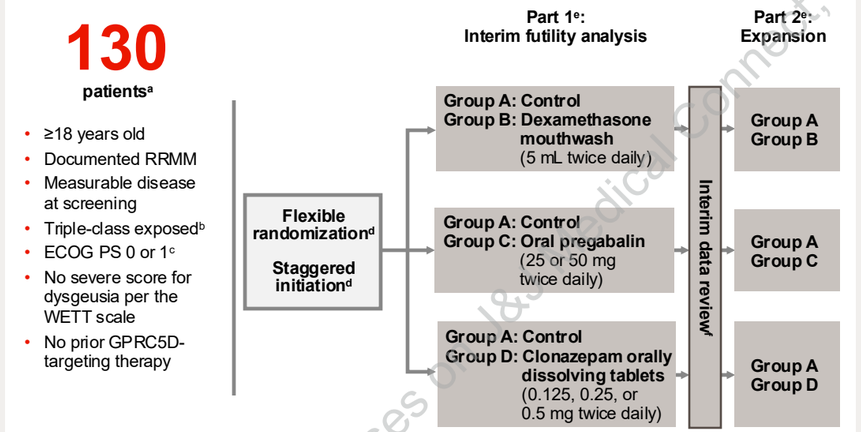
Oral-related AEs including, but not limited to:
- Dysgeusia: distorted taste
- Ageusia: lack of taste
- Hypogeusia: less sensitivity to taste
- Xerostomia: feeling of dry mouth
- Dysphagia: difficulty swallowing
- Oral mucositis: inflammation and ulcerations in the mouth

No. of patients with oral-related AEs,[a] n (%)	MonumenTAL-1	
	Tal QW (n=143)	Tal Q2W (n=154)
Any Grade	103 (72)	110 (71)
Leading to dose reduction	10 (7)	6 (4)
Leading to discontinuation	0	3 (2)

[a]Including ageusia, dysgeusia, hypogeusia, and taste disorder.
Q2W, every other week; QW, weekly.

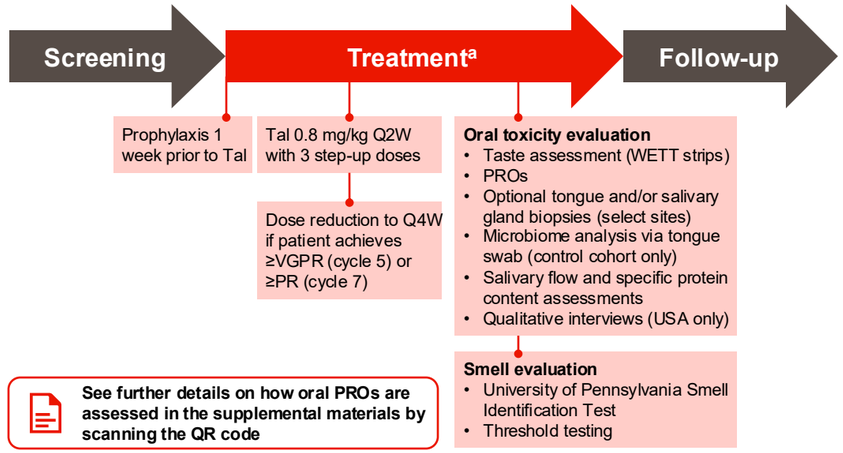
Methods

Figure 2. TALISMAN is a randomized, multicenter, open-label, phase 2 study



[a]Maximum n=130 target enrollment. [b]Including a proteasome inhibitor, immunomodulatory drug, and anti-CD38 monoclonal antibody. [c]ECOG PS of 2 or 3 permitted once physical limitations are stable. [d]To accommodate prophylaxes being available at different times. [e]2-part enrollment (part 1 and part 2 expansion) to allow for independent futility analysis of each cohort. [f]To evaluate study cohorts after approximately 15 patients per cohort have been treated with Tal for ≥3 cycles (or discontinue prior to 3 cycles).
ECOG PS, Eastern Cooperative Oncology Group performance status; WETT, Waterless Empirical Taste Test.

Figure 4. TALISMAN is conducted in 3 phases and includes assessment of oral toxicities and smell utilizing objective and patient-reported measures



See further details on how oral PROs are assessed in the supplemental materials by scanning the QR code

[a]An interim analysis will be conducted to evaluate study cohorts after ~15 patients have been treated with Tal for ≥3 cycles to avoid prolonged prophylaxis with no positive effects.
PR, partial response; PRO, patient-reported outcome; Q4W, every 4 weeks; VGPR, very good partial response.

Figure 3. TALISMAN is being conducted at multiple sites in 6 countries

Table. Endpoints of TALISMAN include outcomes of dysgeusia, efficacy of prophylaxis, efficacy of Tal, safety, and PROs

Primary endpoint

- Rate of occurrence of dysgeusia (25th percentile or below) and severe dysgeusia (10th percentile or below) based on WETT score, time to first onset of severe dysgeusia, and rate of resolution/improvement of dysgeusia at 3 and 6 months

Secondary endpoints

Efficacy of prophylaxis
- Change from baseline in WETT score over time
- Percentage of time with dysgeusia
- Change from baseline in body weight and BMI over time
- Change from baseline in results of smell identification and smell detection threshold test

Efficacy of Tal
- ORR (≥PR), ≥VGPR rate, ≥CR rate, duration of response, PFS, time to response

Safety
- Incidence, severity, timing, and duration of AEs, including oral toxicities (dysgeusia, oral mucositis, dysphagia, xerostomia)

PROs
- Change from baseline in health-related quality-of-life assessments (EORTC QLQ-C30 and EORTC QLQ-OH15)
- Proportion of patients reporting oral symptoms using the PRO-CTCAE, Short Xerostomia Inventory, Epstein Taste Scale, and Scale of Subjective Total Taste Acuity

BMI, body mass index; CR, complete response; EORTC QLQ-C30, European Organisation for Research and Treatment of Cancer quality of life questionnaire core 30; EORTC QLQ-OH15, European Organisation for Research and Treatment of Cancer quality of life questionnaire-oral health; PFS, progression-free survival; PRO-CTCAE, patient-reported outcomes version of the Common Terminology Criteria for Adverse Events.

References
1. Verkleij CPM, et al. *Blood Adv* 2021;5:2196-215. 2. TALVEY™ (talquetamab-tgvs). Prescribing information. Horsham, PA: Janssen Biotech, Inc.; 2023. 3. European Medicines Agency. TALVEY™ (talquetamab). Accessed July 26, 2024. https://www.ema.europa.eu/en/medicines/human/summaries-opinion/talvey. 4. Rasche L, et al. Presented at EHA 2024 Hybrid Congress; June 13–16, 2024; Madrid, Spain. P915. 5. Chari A, et al. *Clin Lymphoma Myeloma Leuk* 2024; S2152-2650(24)00174-5. 6. Popat R, et al. Presented at IMS; September 25–28, 2024; Rio de Janeiro, Brazil.

Multiple Myeloma

Presented by L Sanchez at the American Society of Clinical Oncology (ASCO) Annual Meeting; May 30–June 3, 2025; Chicago, IL, USA & Virtual