Diabetes Ther (2020) 11:2441–2442
https://doi.org/10.1007/s13300-020-00899-7

LETTER

Letter to the Editor Regarding: Patient Preferences for GLP-1 Receptor Agonist Treatment of Type 2 Diabetes Mellitus in Japan: A Discrete Choice Experiment

Toshiyuki Iwahori

Received: May 27, 2020 / Published online: August 7, 2020

Key Summary Points

Why carry out this study?

I found attribute values cited for cardiovascular outcome in the patient preference study manuscript entitled "Patient Preferences for GLP-1 Receptor Agonist Treatment of Type 2 Diabetes Mellitus in Japan: A Discrete Choice Experiment" presented by Brooks et al. were incorrect.

I would like to point out that the authors had derived their main result with inappropriate bias.

I believe that the discussion in this letter to the editor will ensure fair scientific communication among discussions in this field.

What was learned from the study?

The references related to attribute levels must be clarified and disclosed appropriately in the patient preference studies to ensure scientific integrity.

Brooks et al. have investigated the patient preferences for glucagon-like peptide 1 receptor agonist (GLP-1 RA) treatment among Japanese patients with type 2 diabetes mellitus (T2DM) [1]. In this study, Brooks et al. used a discrete choice experiment (DCE) via web-based survey to evaluate patient preferences for clinical treatment features of two GLP-1 RAs, dulaglutide 0.75 mg and semaglutide 0.50 mg. The DCE examined patient preferences for five treatment attributes, namely method of administration, hemoglobin A1c (HbA1c) change, reduction in cardiovascular (CV) risk, weight change, and common side effects. The DCE choice task included a direct comparison of the dulaglutide 0.75 mg versus semaglutide 0.50 mg treatment profiles. The clinical implication of the study presented by Brooks et al. was that reduction in CV risk and HbA1c change were the key drivers of GLP-1 RA medication preference. However, Brooks et al. appear to have used the incorrect CV outcome (OT)-related attribute for semaglutide 0.50 mg in this patient preference study.

Digital Features To view digital features for this article go to https://doi.org/10.6084/m9.figshare.12728345.

T. Iwahori (✉)
Medicines Development Unit Japan and Medical Affairs, Eli Lilly Japan K.K., Kobe, Japan
e-mail: iwahori_toshiyuki@lilly.com

The CVOT-related attribute levels representing the dulaglutide 0.75 mg and semaglutide 0.50 mg treatment profile were defined as "no data for the benefit or risk in CV diseases (heart attack, stroke, death due to CV diseases)" and "26% reduction of risk in CV diseases (heart attack, stroke, death due to CV diseases)" in this study, respectively [1]. Brooks et al. did not disclose the sources or references of these applied attribute levels in their publication; however, it seems that findings from Semaglutide Unabated Sustainability in Treatment of Type 2 Diabetes (SUSTAIN-6) relate to this CVOT-related attribute for semaglutide 0.5 mg since the main result of this study reports 26% reduction of risk in CV outcome events in comparison with placebo [2]. It is critical to note that in SUSTAIN-6, the main cardiovascular results were presented as the combined result of both semaglutide 0.5 mg and 1.0 mg to maintain statistical significance (hazard ratio 0.74, 95% CI 0.58–0.95, $p = 0.02$ for superiority); however, semaglutide 0.5 mg alone was not associated with significant reduction (hazard ratio 0.77, 95% CI 0.55–1.08, $p = 0.13$ for superiority) in CV outcomes [2]. Therefore, it is reasonable to infer that Brooks et al. used the combined dose CVOT-related attribute for surveying the patient's preference in this study instead of the attribute of semaglutide 0.5 mg alone. This has resulted in an inappropriate presentation on the CVOT-related attribute in this study.

The references related to attribute levels must be clarified and disclosed appropriately in patient preference studies to ensure scientific integrity.

ACKNOWLEDGEMENTS

Funding. No funding or sponsorship was received for this study or publication of this article.

Authorship. The author meets the International Committee of Medical Journal Editors (ICMJE) criteria for authorship for this article, takes responsibility for the integrity of the work as a whole, and has given an approval for this version to be published.

Disclosures. Dr. Toshiyuki Iwahori is an employee of Eli Lilly Japan K.K.

Compliance with Ethics Guidelines. This article is based on previously conducted studies and does not contain any studies with human participants or animals performed by the author.

Data Availability. Data sharing is not applicable to this article as no datasets were generated or analyzed for this publication.

REFERENCES

1. Brooks A, Langer J, Tervonen T, Hemmingsen MP, Eguchi K, Bacci ED. Patient preferences for GLP-1 receptor agonist treatment of type 2 diabetes mellitus in Japan: a discrete choice experiment. Diabetes Ther. 2019;10:735–49.

2. Marso SP, Bain SC, Consoli A, et al. Semaglutide and cardiovascular outcomes in patients with type 2 diabetes. N Engl J Med. 2016;375(19):1834–44.