RESPONSE TO COMMENT ON KHUNTI ET AL.

# Clinical Inertia in People With Type 2 Diabetes: A Retrospective Cohort Study of More Than 80,000 People. Diabetes Care 2013;36:3411–3417

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We would like to thank Esposito et al. (1) for their interest in and comment on our article (2), in particular their recognition of the importance of the study and the significance of our results. Regarding their concern surrounding the definition of clinical inertia, there are several points that we would like to expand upon. First, we acknowledge that individualizing $HbA_{1c}$ targets may be needed for certain patients (e.g., the elderly) for whom balancing good glycemic control against the risk of hypoglycemia is even more important (3). $HbA_{1c}$ targets in treatment guidelines are only a recommendation. However, these clinical guidelines are used by physicians in practice, and as the basis of our analyses, we used the most appropriate cutoff points available for examining a large population. Information regarding personalized treatment is not available in the Clinical Practice Research Datalink (CPRD) database and thus could not be factored into the analyses. However, in considering individualization of glycemic targets, we specifically conducted analyses for $HbA_{1c}$ targets of $<$7%, $<$7.5%, and $<$8% to reflect the impact of a number of factors, such as disease trajectory, on the goals set. For example, those people treated with one oral antidiabetes drug would, in many cases, be earlier in their disease progression and therefore may need stricter targets, while those treated with three oral antidiabetes drugs may have more flexible targets. Several studies have indicated that extremes of blood glucose concentration (both low and high) should be avoided (4) to minimize the risk of all-cause mortality. The clinical guidelines are, on average, a valuable yardstick for treating patients. In our study, the baseline $HbA_{1c}$ levels were $>$8.4%, well above what would be considered good glycemic control. Individualized targets may not be sufficient in explaining this discrepancy (5).

Our results reflect the current situation in the U.K., and the large and nationally representative cohort used in our analysis provides a robust assessment of clinical inertia despite any limitations surrounding its definition.

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## References

1. Esposito K, Maiorino MI, Bellastella G, Giugliano D. Comment on Khunti et al. Clinical inertia in people with type 2 diabetes: a retrospective cohort study of more than 80,000 people. Diabetes Care 2013;36:3411–3417 (Letter). Diabetes Care 2014;37:e113. DOI: 10.2337/dc13-2511

2. Khunti K, Wolden ML, Thorsted BL, Andersen M, Davies MJ. Clinical inertia in people with type 2 diabetes: a retrospective cohort study of more than 80,000 people. Diabetes Care 2013;36:3411–3417

3. Teoh H, Home P, Leiter LA. Should A1C targets be individualized for all people with diabetes? Arguments for and against. Diabetes Care 2011;34(Suppl. 2):S191–S196

4. Inzucchi SE, Bergenstal RM, Buse JB, et al.; American Diabetes Association (ADA); European Association for the Study of Diabetes (EASD). Management of hyperglycemia in type 2 diabetes: a patient-centered approach: position statement of the American Diabetes Association (ADA) and the European Association for the Study of Diabetes (EASD). Diabetes Care 2012;35:1364–1379

5. Currie CJ, Peters JR, Tynan A, et al. Survival as a function of HbA(1c) in people with type 2 diabetes: a retrospective cohort study. Lancet 2010;375:481–489

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