RESPONSE TO COMMENT ON HOME ET AL.

Predictive and Explanatory Factors of Change in HbA_{1c} in a 24-Week Observational Study of 66,726 People With Type 2 Diabetes Starting Insulin Analogs. Diabetes Care 2014;37:1237–1245

Philip D. Home,[1] Chunduo Shen,[2] Mohammad I. Hasan,[3] Zafar A. Latif,[4] Jian-Wen Chen,[2] and Guillermo González Gálvez[5]

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We thank Esposito et al. (1) for their comments regarding our analysis (2). It is indeed logical that baseline insulin regimen should have some power in predicting HbA_{1c} change, perhaps particularly in insulin-naïve people with diabetes. The primary A_1chieve results do report that the mean reduction in HbA_{1c} associated with starting a basal insulin plus insulin aspart regimen was −2.8% (−31 mmol/mol) in insulin-naïve participants, compared with −2.2% (−24 mmol/mol) with biphasic aspart, −2.1% (−23 mmol/mol) with insulin detemir, and −2.3% (−25 mmol/mol) with insulin aspart alone (statistical comparisons across groups were not conducted due to the observational design) (3). Nevertheless, in this current analysis, baseline insulin regimen did not appear to have strong predictive power, contrary to the analysis by Esposito and colleagues (4). However, we note that in studies in which regimens have been directly compared, little difference is found between insulins—this being true for insulin analogs in the Treating To Target in Type 2 Diabetes (4-T) study (5) and for different basal insulins in a host of treat-to-target studies (6,7). The large improvement in HbA_{1c} in A_1chieve (3), and to a rather good level for routine care, may then be leaving little room for differentiating between insulins. In any case, it is reassuring to know that appropriate insulin use, irrespective of regimen, in patients with type 2 diabetes with poor blood glucose control can be associated with marked improvements in vascular risk factors (3). It is also reassuring that, as mentioned by Esposito et al. (1), the predictors of HbA_{1c} response derived from meta-analyses of published randomized controlled trials are similar to this A_1chieve analysis and others from routine clinical care around the world.

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[1]*Department of Diabetes, Institute of Cellular Medicine, Newcastle University, Newcastle upon Tyne, U.K.*
[2]*Novo Nordisk International Operations A/S, Zürich, Switzerland*
[3]*Miracles, Diabetic Institute Pakistan, Lahore, Pakistan*
[4]*Bangladesh Institute of Research & Rehabilitation in Diabetes, Endocrine and Metabolic Disorders, Dhaka, Bangladesh*
[5]*Instituto Jalisciense de Investigacion en Diabetes y Obesidad, Guadalajara, Mexico*

Corresponding author: Philip D. Home, philip.home@newcastle.ac.uk.

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