Letters

- abetes Association, the North American Association for the Study of Obesity, and the American Society for Clinical Nutrition. *Diabetes Care* 27:2067–2073, 2004
- Norris SL, Engelgau MM, Venkat Narayan KM: Effectiveness of self-management training in type 2 diabetes: a systematic review of randomized controlled trials. *Diabetes Care* 24:561–587, 2001
- Snapinn SM: Noninferiority trials. Curr Control Trials Cardiovasc Med 1:19–21, 2000

An Open,
Randomized,
Parallel-Group Study
to Compare the
Efficacy and Safety
Profile of Inhaled
Human Insulin
(Exubera) With
Glibenclamide as
Adjunctive Therapy
in Patients With Type
2 Diabetes Poorly
Controlled on
Metformin

Response to Kanna and Abreu-Pacheco

e thank Kanna and Abreu-Pacheco (1) for their comments on our study (2). As Kanna and Abreu-Pacheco point out, overweight and obesity are strongly linked to the development of type 2 diabetes and can complicate its management. While most patients with type 2 diabetes are overweight (3), this study (2) included individuals with a range of BMI values typical of those seen in clinical practice; mean BMI in the inhaled insulin and glibenclamide groups was 31.8 (range 19-51) and 31.1 (22-47), respectively. When analyzed by baseline BMI values, the mean change from baseline A1C in the moderately high A1C arm (≥ 8 to $\leq 9.5\%$) was -1.6, -1.3, and -1.5% in patients with baseline BMI values of $<30, 30-35, and <math>\geq 35$ kg/m², respectively, compared with -1.5% for all subjects. In the very high A1C arm (>9.5%), mean change from baseline A1C was -3.1, -2.8, and -2.8% in patients with baseline BMI values of $<30, 30-35, and <math>\ge 35 \text{ kg/m}^2$, respectively, compared with -2.9% for all subjects. The results show no meaningful differences between the BMI categories, and the authors therefore believe it to be unlikely that the baseline BMI values could have confounded the A1C results.

For the duration of the study, patients were required to follow an American Diabetes Association diet (with 30% fat and calories sufficient to maintain ideal body weight) and to perform 30 min of moderate exercise at least 3 days per week. There was no specific measure of compliance with diet and exercise regimens during the study, but patients were reminded of their importance at each clinic visit.

Finally, we would like to point out that our study was open label and not blinded. As highlighted in the article, a double-blind study, while desirable, was not possible for two principal reasons: 1) it was not possible to manufacture a suitable placebo for inhaled insulin, and 2) it is generally inappropriate to blind treatment when individualized flexible dose titration is needed for effective management with exogenous insulin.

ANTHONY H. BARNETT, BSC, MD, FRCP¹

MANFRED DREYER, MD²

PETER LANGE, MD³

MARJANA SERDAREVIC-PEHAR,⁴

ON BEHALF OF THE EXUBERA PHASE III

STUDY GROUP

From the ¹University of Birmingham and Heart of England National Health Service Foundation Trust (Teaching), Birmingham, U.K.; the ²Department of Diabetes and Metabolism, Bethanien Krankenhaus, Hamburg, Germany; the ³Department of Respiratory Medicine, Hvidovre University Hospital, Hvidovre, Denmark; and ⁴Pfizer Ltd., Sandwich, U.K.

Address correspondence to A.H. Barnett, Undergraduate Centre, Birmingham Heartlands Hospital, Bordesley Green East, Birmingham, B9 5SS, U.K. E-mail: anthony.barnett@heartofengland.nhs.uk.

M.S.-P. is an employee of Pfizer.
DOI: 10.2337/dc06-2173
© 2007 by the American Diabetes Association.

References

- 1. Kanna B, Abreu-Pacheco H: An open, randomized, parallel-group study to compare the efficacy and safety profile of inhaled human insulin (Exubera) with glibenclamide as adjunctive therapy in patients with type 2 diabetes poorly controlled on metformin (Letter). *Diabetes Care* 30:445–446, 2007
- 2. Barnett AH, Dreyer M, Lange P, Serdarevic-Pehar M, the Exubera Phase III Study Group: An open, randomized, parallelgroup study to compare the efficacy and safety profile of inhaled human insulin (Exubera) with glibenclamide as adjunc-

- tive therapy in patients with type 2 diabetes poorly controlled on metformin. *Diabetes Care* 29:1818–1825, 2006
- 3. Daousi C, Casson IF, Gill GV, MacFarlane IA, Wilding JPH, Pinkney JH: Prevalence of obesity in type 2 diabetes in secondary care: association with cardiovascular risk factors. *Postgrad Med J* 82:280–284, 2006

Hyperglycemia and Diabetes in Patients With Schizophrenia or Schizoaffective Disorders

Response to Cohen et al.

e commend Cohen et al. (1) on their report on hyperglycemia and diabetes in patients with schizophrenia and schizoaffective disorders. To our knowledge, this is the first large study of oral glucose tolerance tests in this population.

Cohen et al. found that the prevalence rate of diabetes was significantly higher in patients with schizophrenia and schizoaffective disorders than in the general population. They did not detect a differential effect of antipsychotic monotherapy in diabetogenic effects, and they consequently proposed a modification of the consensus statement on antipsychotic drugs, obesity, and diabetes, i.e., measurement of fasting glucose in all patients with schizophrenia irrespective of the prescribed antipsychotic drug. We argue that the differences in the metabolic effects of different antipsychotic agents are too clear in the literature to justify any notion that the antipsychotic agents are comparable in their metabolic effects.

Comparative studies of antipsychotic agents are limited in their scope by the difficulty in conducting randomized controlled trials of antipsychotic agents. For many patients, specific antipsychotic agents are indicated ahead of the others based on the information available at that time. For example, clozapine is difficult to study in comparative investigations because it is not recommended by most as a first-line treatment. A recent study (2) addressed this issue to some extent by conducting a randomized controlled trial of risperidone and olanzapine in dogs. The dogs who received olanzapine developed hepatic insulin resistance, whereas those who received risperidone did not. Fur-