



## RESPONSE TO COMMENT ON

# Grunberger “Insulin Analogs—Are They Worth It? Yes!” Diabetes Care 2014;37:1767–1770 and Davidson “Insulin Analogs—Is There a Compelling Case to Use Them? No!” Diabetes Care 2014;37:1771–1774

Mayer B. Davidson

Diabetes Care 2014;37:e231 | DOI: 10.2337/dc14-1605

The letter by Giugliano et al. (1) updates and provides more detail about the increasing costs of the analog insulins. Sixty randomized control trials involving 21,534 patients comparing human versus analog insulins found no differences in efficacy and only minor differences in hypoglycemia (which no doubt would have been much less if bedtime snacks had been routinely ingested) (2). The fact that the share of the insulin market for human insulins is now only 2–3% highlights the remarkable success of pharmaceutical companies in promoting their insulin analog preparations.

Germany's experience in dealing with this issue may be illustrative. Germany's Federal Joint Committee (G-BA) decides which medical services and products the government will fund. Germany's Institute for Quality and Efficiency in Health Care (IQWiG) determines the cost/benefit of new drugs. G-BA asked IQWiG to carry out such an analysis in 2009, and the final report found that long-acting insulin analogs (Sanofi's Lantus and

Novo Nordisk's Levemir) showed no proven benefit over human insulin (3). Consequently, G-BA excluded the class of nonhuman insulins for reimbursement. Sanofi subsequently carried out its own real-world studies and convinced 156 individual payers to restore access and premium pricing by the end of 2010 (4).

Perhaps the lesson to be learned from Germany's experience is that negotiations with pharmaceutical companies need to be carried out by large organizations. That has started to happen in the U.S. Express Scripts and CVS Caremark, the largest and second largest pharmacy benefits managers in the country, respectively, have started excluding drugs from their formularies, including several used in the treatment of diabetes (5).

**Acknowledgments.** The author is grateful to Sony Salzman, Investigative Reporter, BioPharm Insight, for the information concerning Germany's experience.

**Duality of Interest.** No potential conflicts of interest relevant to this article were reported.

## References

1. Giugliano D, Petrizzo M, Maiorino MI, Bellastella G, Esposito K. Comment on Grunberger “Insulin analogs—are they worth it? Yes!” Diabetes Care 2014;37:1767–1770 and Davidson “Insulin analogs—is there a compelling case to use them? No!” Diabetes Care 2014;37:1771–1774 (Letter). Diabetes Care 2014;37:e229–e230. DOI: 10.2337/dc14-1390
2. Davidson MB. Insulin analogs—is there a compelling case to use them? No! Diabetes Care 2014;37:1771–1774
3. Institute for Quality and Efficiency in Health Care. Long-acting insulin analogues in type 1 diabetes: no proof of additional benefit compared to human insulin [article online], 2010. Available from [https://www.iqwig.de/en/press/press\\_releases/press\\_releases/long\\_acting\\_insulin\\_analogues\\_in\\_type\\_1\\_diabetes\\_no\\_proof\\_of\\_additional\\_benefit\\_compared\\_to\\_human\\_insulin\\_2417.html](https://www.iqwig.de/en/press/press_releases/press_releases/long_acting_insulin_analogues_in_type_1_diabetes_no_proof_of_additional_benefit_compared_to_human_insulin_2417.html). Accessed 26 June 2014
4. Cattell J, Groves P, Hughes B, Savas S. *How Can Pharmacos Take Advantage of the Real-World Data Opportunity in Healthcare?* Washington, DC, IT Insights, McKinsey & Company, 2011
5. Pollack A. Health insurers are pushing back on drug prices. *New York Times*, 21 June 2014: Sect. A, p. 1