
 COMMENTS AND
 RESPONSES

**Comment on:
 Bergenstal et al.
 A Randomized,
 Controlled Study of
 Once-Daily
 LY2605541, a
 Novel Long-Acting
 Basal Insulin,
 Versus Insulin
 Glargine in Basal
 Insulin-Treated
 Patients With Type 2
 Diabetes. Diabetes
 Care 2012;35:
 2140-2147**

It was good to see the interesting article by Bergenstal et al. (1), from both academic and commercial colleagues, of a novel approach to a long-acting insulin

(LY2605541), possibly hepatospecific, as studied in individuals with type 2 diabetes. Both alanine aminotransferase (ALT) and serum triglycerides were higher compared with a standard insulin comparator, whereas body weight trajectory was lower. This raises important questions for further insulin development.

It would be unusual to measure serum triglycerides and not other serum lipids in such a study. Indeed it would be unusual not to make total, LDL, and HDL cholesterol measurements in a phase 2 study of individuals with any type of diabetes. Given the ALT and triglycerides differences, one might expect lower serum HDL cholesterol. Such lipid profile results are not given in the article, nor high-sensitivity C-reactive protein, which might also have deteriorated with the ALT.

With the ALT change, which might indicate increased liver fat, it could also be speculated that insulin insensitivity in the fasting state would deteriorate, but insulin/C-peptide results are not given, nor a derivative measure such as homeostasis model assessment of insulin sensitivity (HOMA%S). This commentator would go further and expect differences in plasma free fatty acids, and eventually, though perhaps not in 12 weeks, differences in islet β -cell function, as homeo-

stasis model assessment of β -cell function (HOMA%B). Are any such data available?

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References

1. Bergenstal RM, Rosenstock J, Arakaki RF, et al. A randomized, controlled study of once-daily LY2605541, a novel long-acting basal insulin, versus insulin glargine in basal insulin-treated patients with type 2 diabetes. *Diabetes Care* 2012;35:2140-2147