ZGN-1061, a Novel MetAP2 Inhibitor, and Liraglutide Combine to Improve Glycemic Control and Reduce Body Weight in a Rat Model of Diet-Induced Obesity

Bryan F. Burkey1, Philip G. J. Pedersen2, Tanja Xenia Pedersen1, Michael Feigh1, James E. Vath2, Thomas E. Hughes3

1) ZGN-1061, liraglutide, and the combination reduced body weight in DIO rats

- Weight loss occurred as early as the 5th day of treatment and was sustained for the duration of the 35-day study in the active treatment groups (Figure 1).
- ZGN-1061, liraglutide, and combination treatment reduced weight compared to vehicle alone (Figure 2).
- The combination of ZGN-1061 + liraglutide reduced weight early and maintained the benefits seen in both single agent treatments.

2) The combination of ZGN-1061 + liraglutide improved glucose tolerance in DIO rats

- The combination of ZGN-1061 + liraglutide produced a superior reduction in fasting glucose compared to either single agent alone (Figure 3).
- ZGN-1061 + liraglutide and liraglutide monotherapy reduced glucose AUC during OGGT compared to vehicle alone (Figure 4).
- Additionally, ZGN-1061 + liraglutide normalized glucose AUC to levels that were not significantly different from lean, chow-fed animals (Figure 5).

3) The combination of ZGN-1061 + liraglutide improved liver lipids and normalized other metabolic parameters

- ZGN-1061 + liraglutide partially normalized elevated FGF21 and leptin (Figure 6).
- Liver lipids were markedly elevated at baseline and were normalized by treatment with ZGN-1061 alone.
- Further investigation of ZGN-1061 in combination with other glucose-lowering agents is warranted.

REFERENCES


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