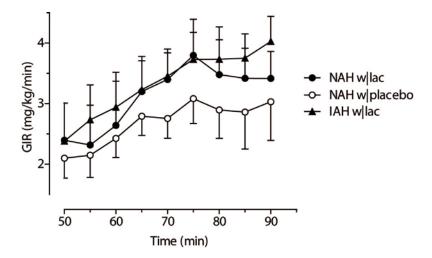
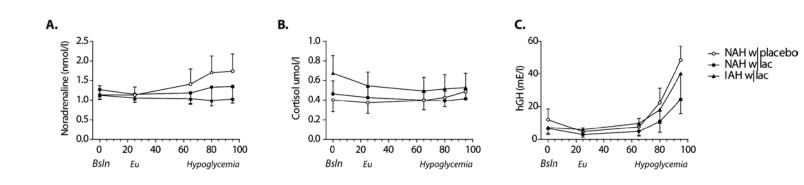
## **Supplementary figures**

Fig S1: Glucose infusion rates during hypoglycemia (GIR). Black triangles: patients with type 1 diabetes and IAH with lactate infusion (IAH w|lac); black circles: T1DM NAH with lactate infusion (NAH w|lac); Open circles: T1DM NAH with saline infusion (NAH w|placebo)



**Fig S2:** Counterregulatory hormone responses to hypoglycemia. (A) Noradrenaline, (B) cortisol, and (C) growth hormone (hGH) responses to hypoglycemia. Black triangles: patients with type 1 diabetes and IAH with lactate infusion (IAH w|lac); black circles: T1DM NAH with lactate infusion (NAH w|lac); Open circles: T1DM NAH with saline infusion (NAH w|placebo).



**Fig S3:** Concentrations of major brain metabolites quantified during euglycemia (white bars) and hypoglycemia (black bars). P values indicate significant differences for euglycemia vs. hypoglycemia within a group.

Asp, aspartate; tCho, total choline; tCre, total creatine; Glu, glutamate; Gln, glutamine; ml, myo-inositol; tNAA, total N-acetylaspartate; scyllo, scyllo-inositol; Tau, taurine

