



Diet-Induced Obesity (DIO) mouse model

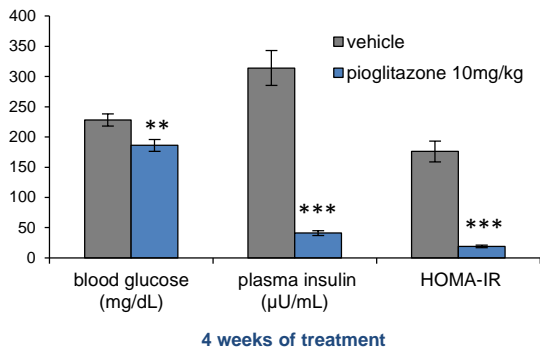
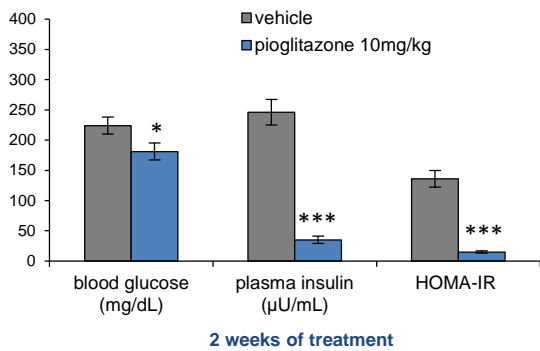
A diet-induced mouse model that exhibit obesity, visceral adiposity, insulin resistance and hyperinsulinemia. A model to study pre-diabetes type 2 diabetes and obesity.

ANIMAL MODEL

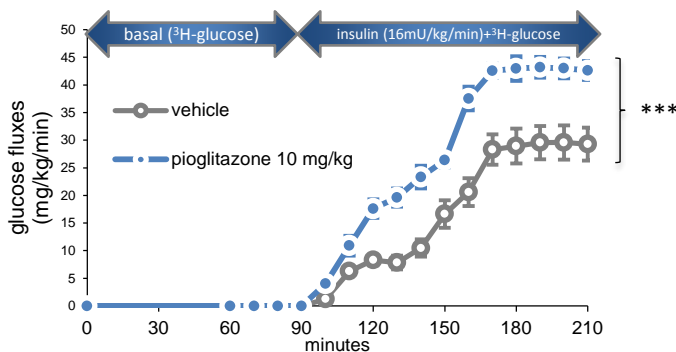
- Background strain: C57BL/6 mice
- Gender: male
- Diet: 60% fat
- Positive reference compounds: metformin, pioglitazone

PHARMACOLOGICAL VALIDATION

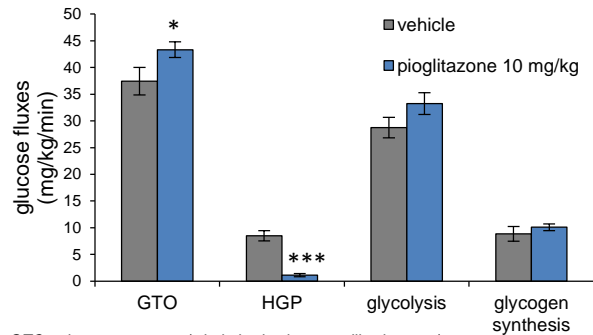
Effect of pioglitazone treatment on blood glucose and plasma insulin in 6 hours fasted mice after 2 weeks and 4 weeks of treatment



Effect of pioglitazone treatment on glucose infusion rate assessed during a basal+euglycemic-hyperinsulinemic clamp (16mU/kg/min) + ³H glucose



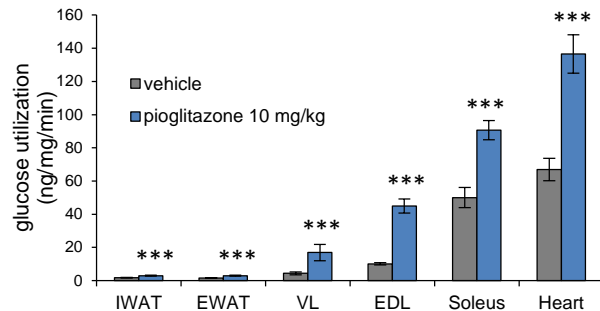
Effects of pioglitazone on glucose fluxes



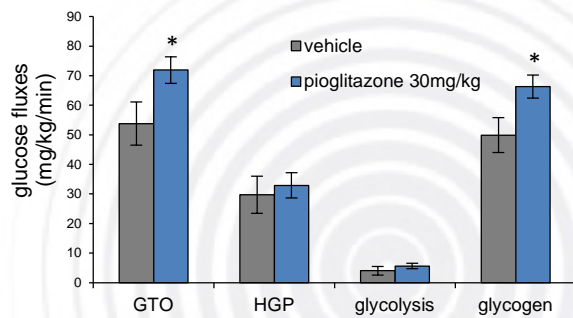
GTO= glucose turn over (whole body glucose utilization rate)

HGP= hepatic glucose production in basal state

Effects of pioglitazone on individual tissue uptake



Effect of pioglitazone treatment (30mg/kg) on glucose infusion rate



*p<0.05, **p<0.01, ***p<0.001 vs. vehicle