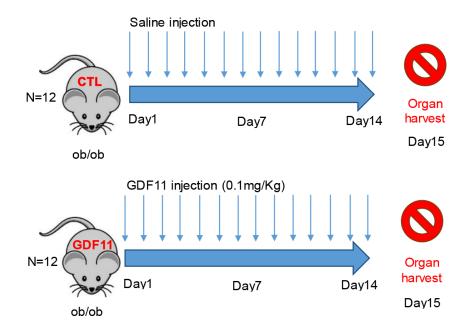
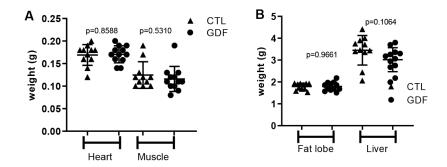
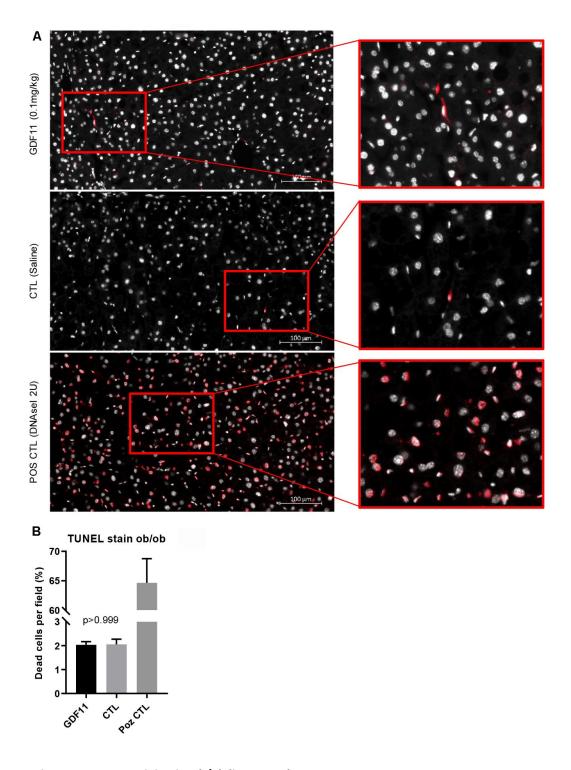
## **SUPPLEMENTARY FIGURES**



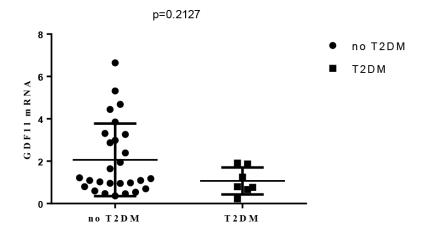
**Supplementary Figure 1.** *In vivo* **experimental setup using** *ob/ob* **mice.** Two experimental groups were injected daily (14 days) with either GDF11 (0,1 mg/kg) or saline (n=12 per group).



**Supplementary Figure 2. Organ weight in** *ob/ob* **BL/6 mice.** Two experimental groups were injected daily (14 days) with either GDF11 (0.1 mg/kg) or saline (n=12 per group). (A) Graph showing average weight of heart and muscle (quadriceps). (B) Graph showing average weight of abdominal fat lobe and liver. No significance was observed between treatment groups (Mann-Whitney U-test).



**Supplementary Figure 3. TUNEL staining in** *ob/ob* **liver samples.** (A) Two experimental groups were injected daily (14 days) with either GDF11 (0,1 mg/kg) or saline (n=6 per group). As positive controls were used samples from both groups treated with DNAse I (2U in 70µl) to induce breaks in DNA structure. (B) Graph showing quantification of TUNEL stain in *ob/ob* liver samples (n=6 per group, n=2 per Pos.CTL). (Mann-Whitney U-test).



Supplementary Figure 4. Plot showing GDF11 mRNA levels in patients with or without type II diabetes (T2DM) (Mann-Whitney U-test).