Changes at 5 months during remission of type 2 diabetes

- Fasting glucose
- Liver fat
- Pancreas fat
- Acute insulin response

Taylor et al, Cell Metab 2018; 28: 1-10
Complete recovery of functional beta cell mass as assessed by maximal (glucose + arginine) insulin secretory capacity

Zhyzhneuskaya et al. Diabetes Care 2020; 43:813
Remission depends on capacity of beta cells to recover once lipid excess is removed.

Al-Mrabehe et al. Cell Metabolism 2020; 31:233-249
Observing T2DM develop: weight regain causes reaccumulation of fat inside the pancreas and loss of first phase insulin response.

Al-Mrabe et al, Cell Metabolism 2020; 31:233-249
Sustaining remission demands continued suppression of hepatic VLDL1-TG production & no regain of pancreas fat

**Time course**

**5 - 24 months**

- Responders: 
  - p=0.013

- Relapsers: 
  - p=0.002

**0 - 24 months**

- Responders: 
  -

- Relapsers: 
  -

*Al-Mrabe et al, Cell Metabolism 2020; 31:233-249*