

(MP78-06) Testosterone treatment prevents progression from prediabetes to Type 2 Diabetes (T2DM) in 303 hypogonadal men : 14-year real-life data from a registry

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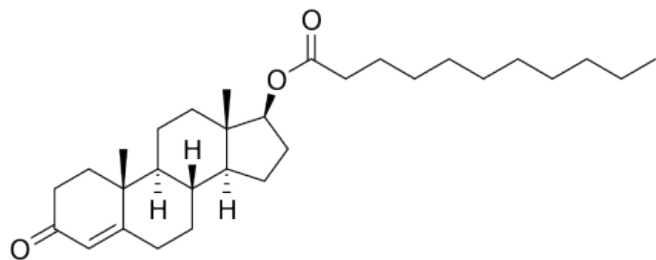
❑ Introduction & Objectives :

- ▶ Men with hypogonadism are at increased risk for developing insulin resistance (IR), prediabetes and type 2 diabetes.
- ▶ Does testosterone therapy (TTh) in men with hypogonadism and **prediabetes** prevents progression to T2D?

❑ Methods:

- Pooled Data of 303 men with hypogonadism,
- Treatment group (T-group) : 220 men (TU;T-group),
- Control group: 83 men (CTRL).
- Anthropometric and metabolic parameters were measured.

Changes in fasting glucose, HgA1c, weight, TG:HDL ratio, TyG index, LAF, Testosterone, AMS scale



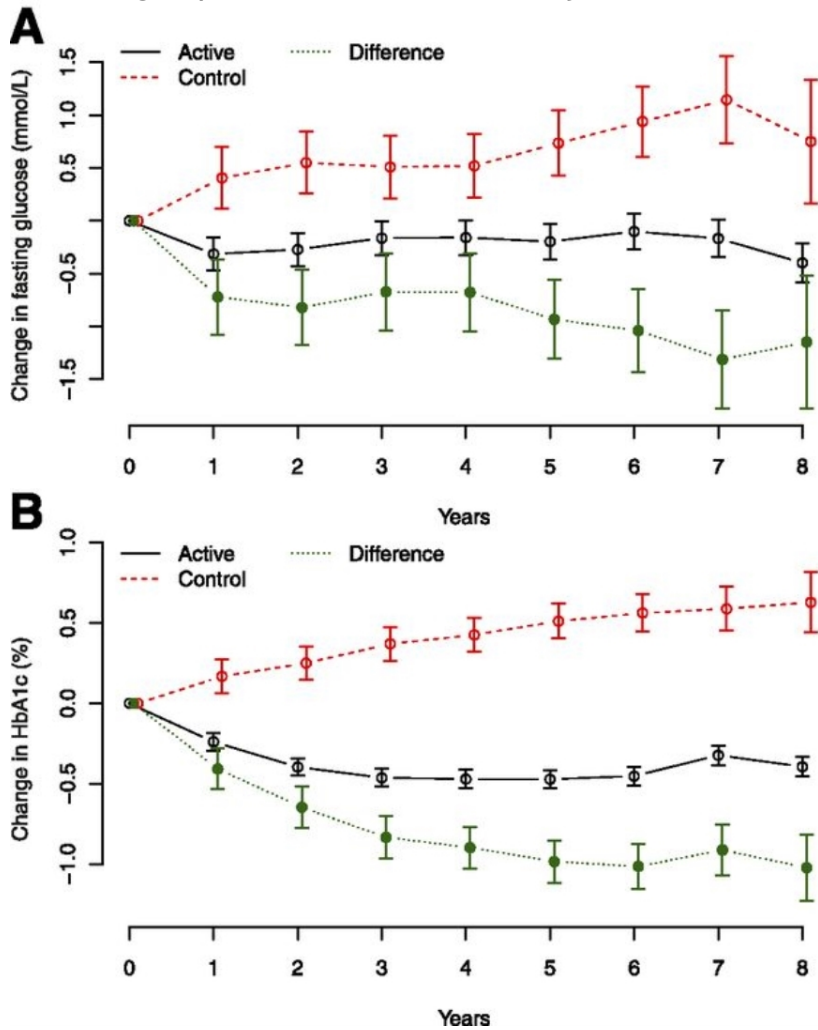
❑ results: Mean follow-up: 6.6 years (T-group), 5.6 years (CTRL)

	T- group	CTRL
HgA1c	↓ from 5.9±0.2 to 5.5±0.3% *	↑ from 5.9±0.2 to 6.1±0.6%*
TyG index	↓ from 9.3±0.4 to 9.0±0.4	↑ from 8.9±0.6 to 9.3±0.4
weight	↓ 96.7±12.3 to 89.0±9.6 kg	↑ from 92.9±10.4 to 98.2±6.3 kg
Weight loss	Loss of 9.2±8.3% **	Gain of 9.2±3.9% **
Waist circumference	↓ 104.2±7.1 to 98.2±6.5 cm**	↑ 102.5±9.7 to 106±3.2 cm**
Mortality	7.4%	16.1 %

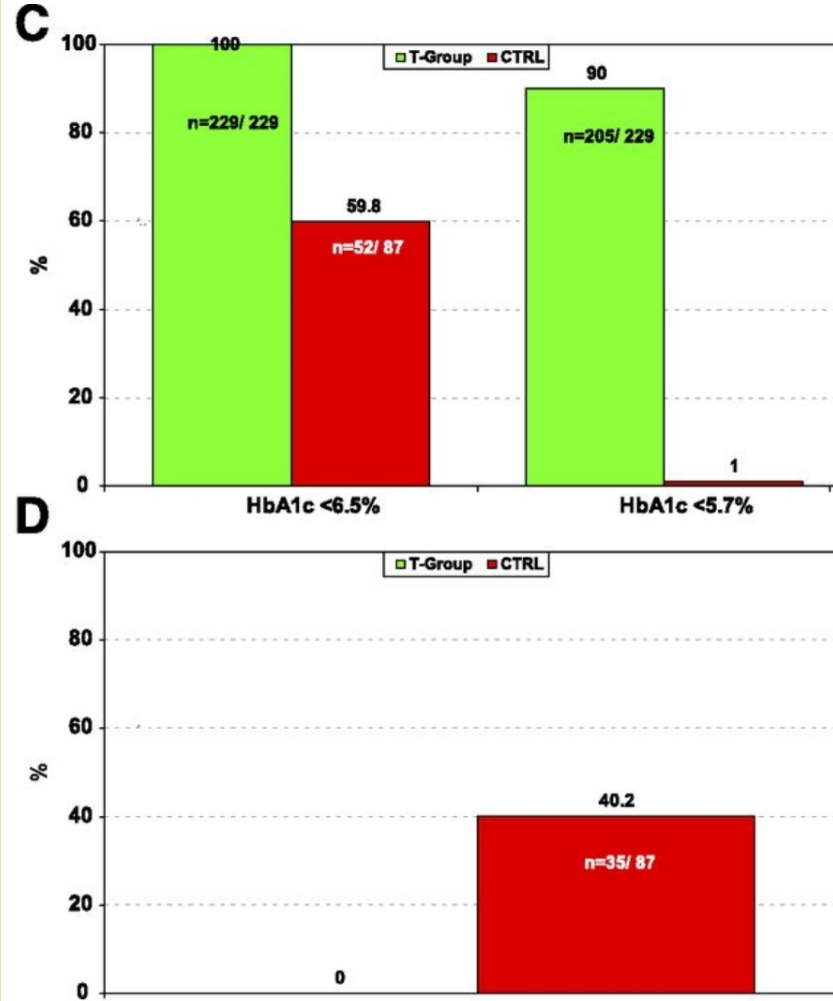
*(p<0.0005)

** (p<0.0001)

A and B: Changes in fasting glucose and HbA1c between the two groups, with the estimated adjusted differences.



C: Proportion of patients achieving an HbA_{1c} <6.5% and normal glucose regulation (HbA_{1c} <5.7%)



D: Proportion of patients progressing to T2D.

Conclusion: Testosterone therapy prevented progression from prediabetes to T2DM in hypogonadal men while more than 40% of untreated hypogonadal men developed T2DM. This effect may have been mediated by weight loss and the invariable increase in lean mass achieved by testosterone.