

Differences in pubertal development and anthropometry between normal population and type 1 diabetic child debut

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INTRODUCTION: The deterioration caused DMtipo1 anthropometric and pubertal development. With intensive treatment, improved HbA1c and less microvascular complications should be similar to normal population.

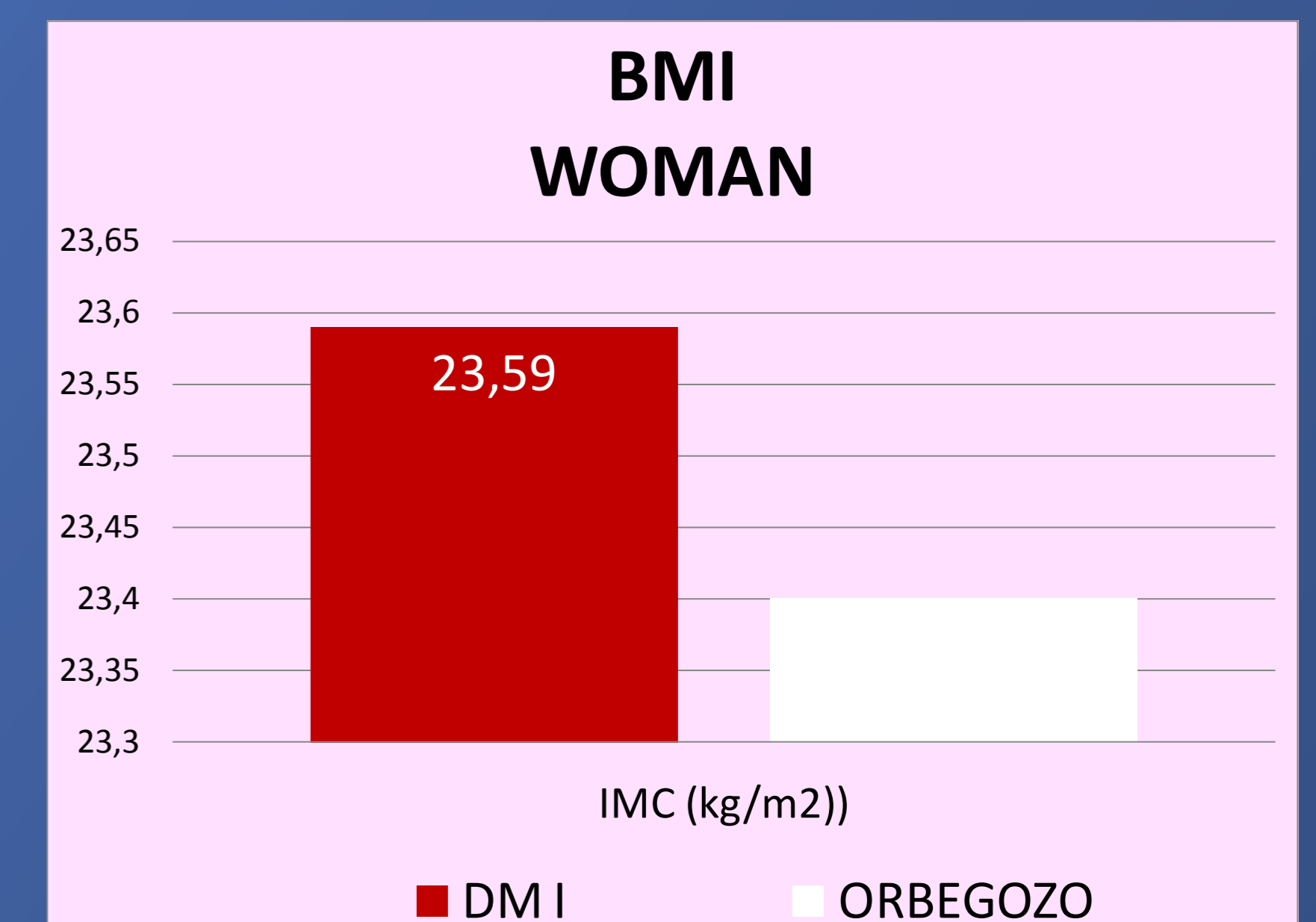
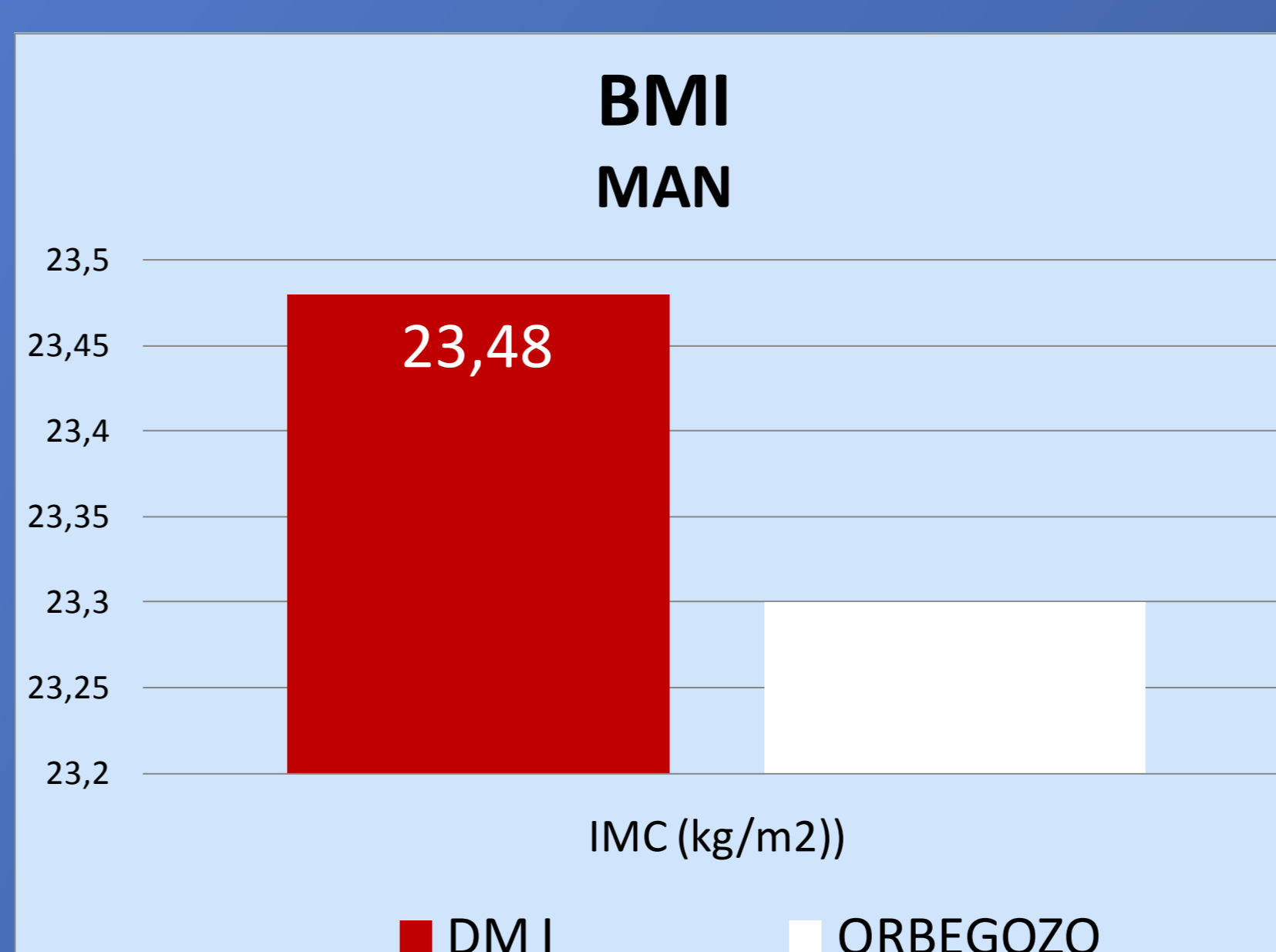
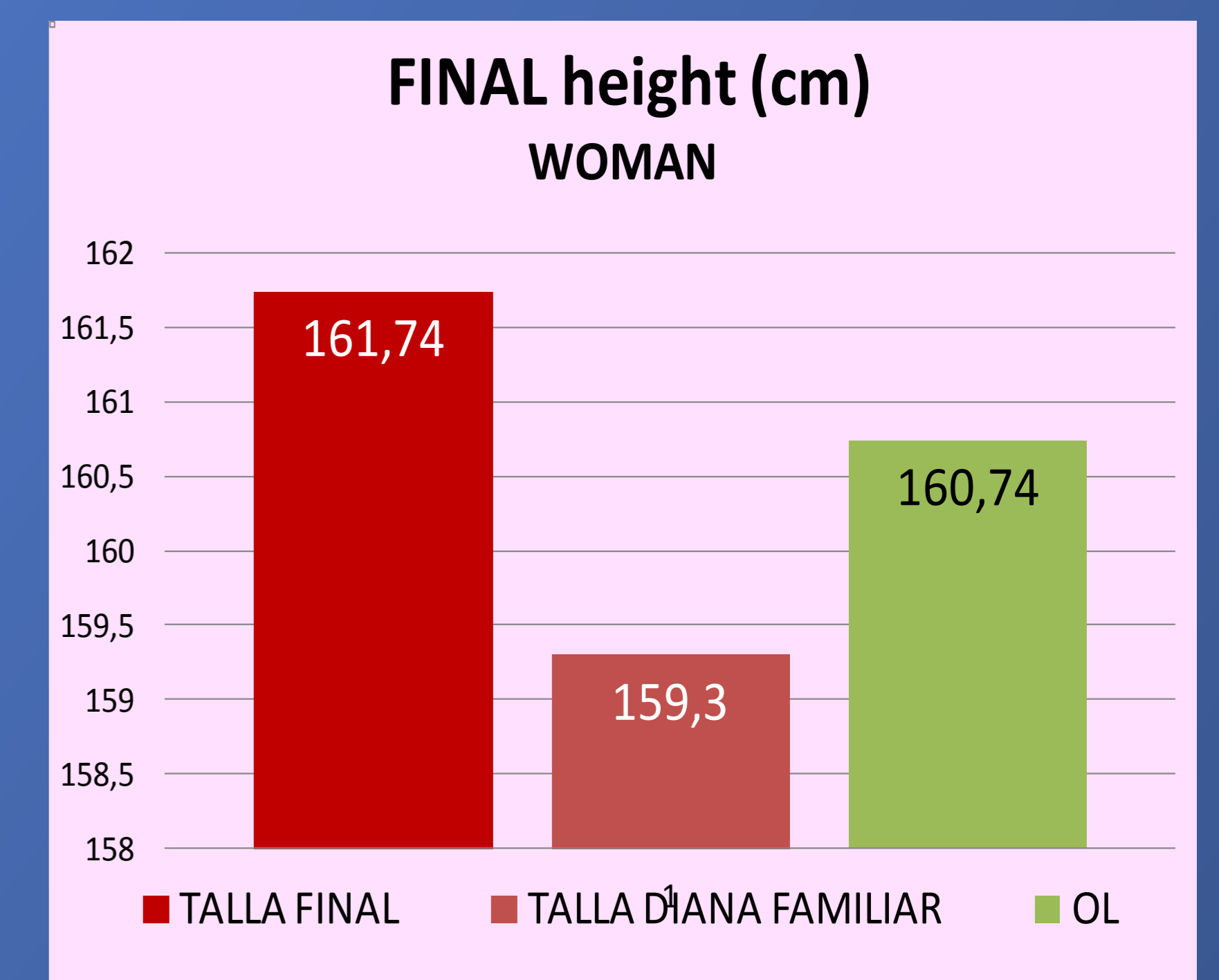
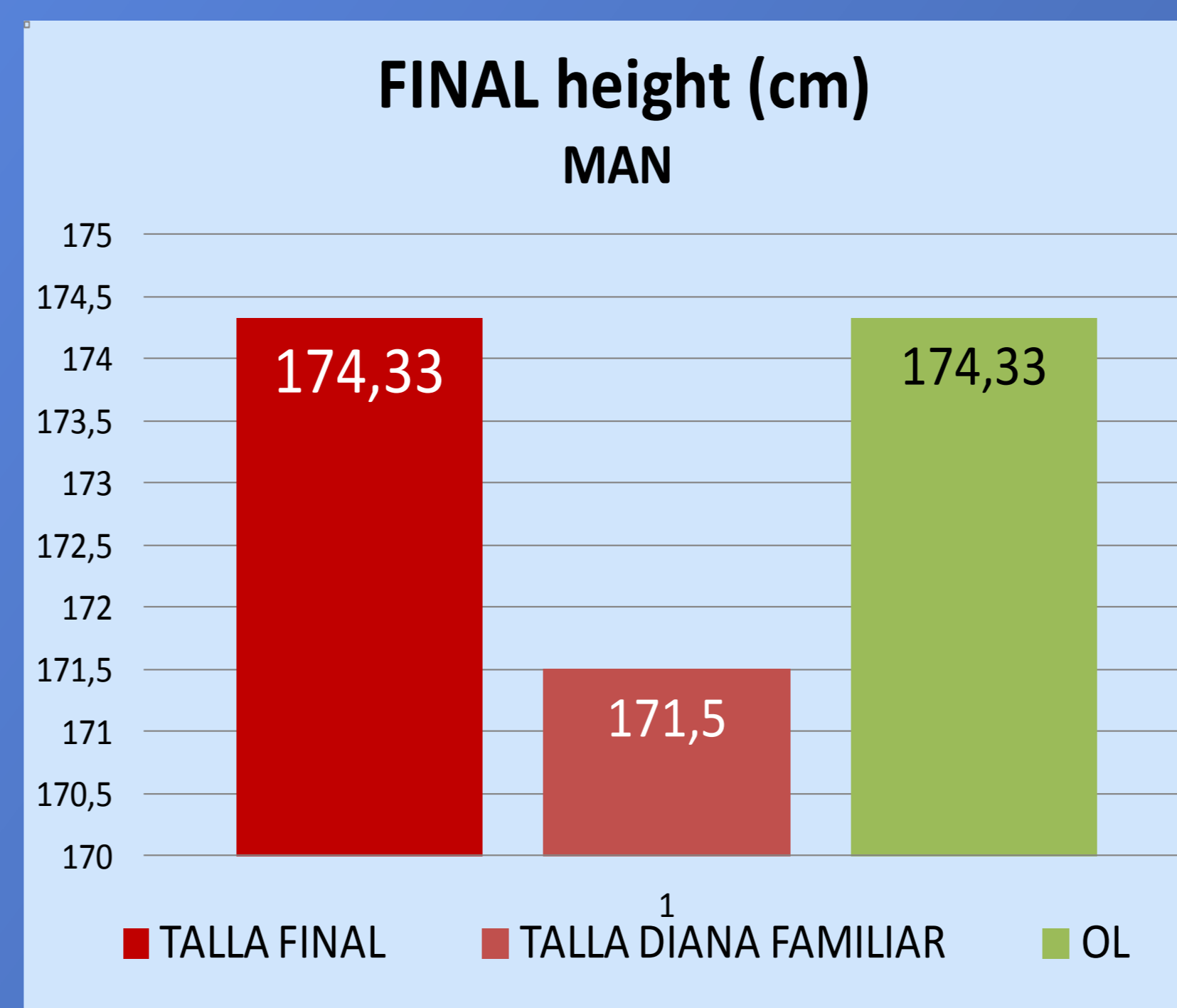
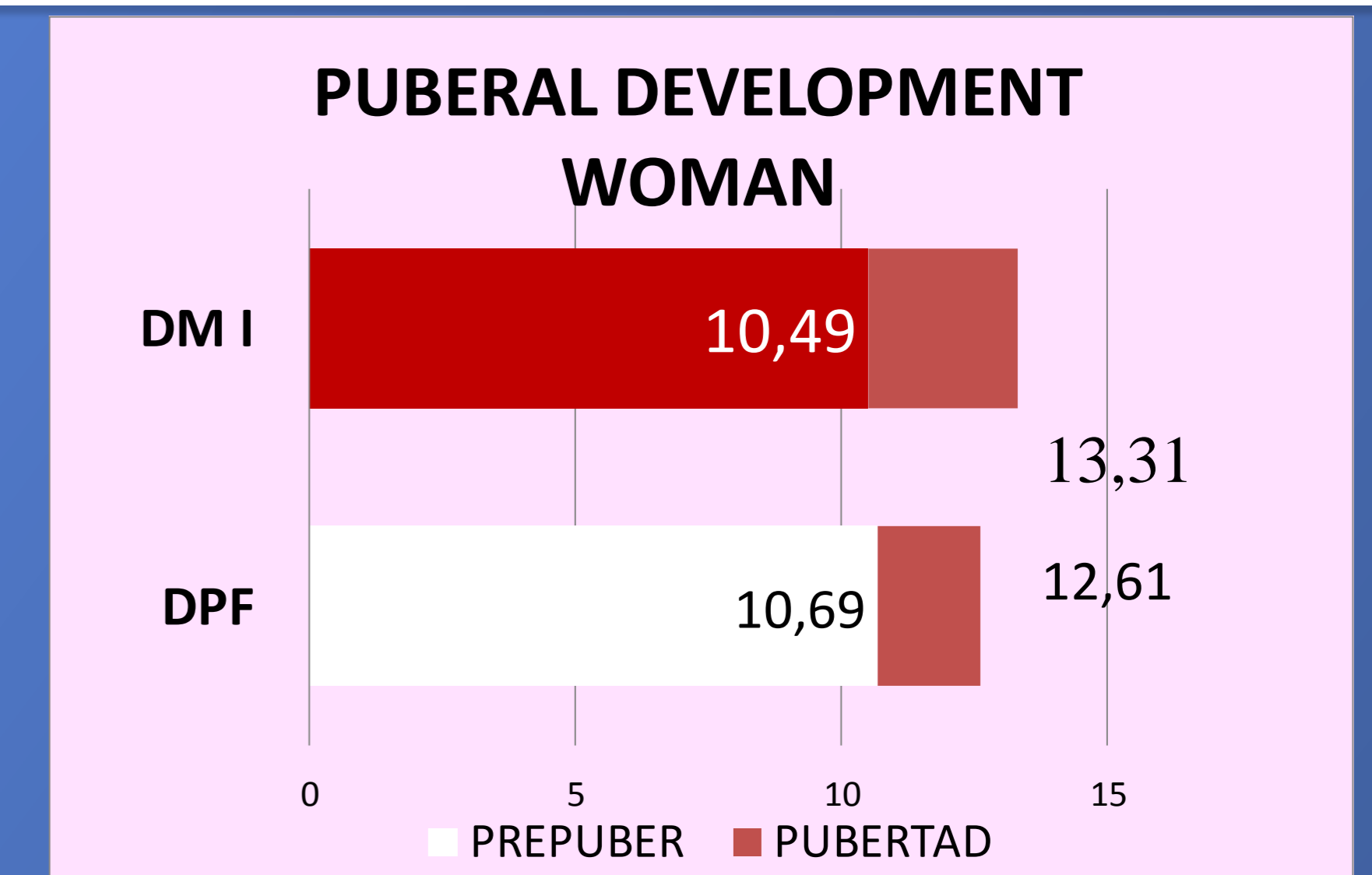
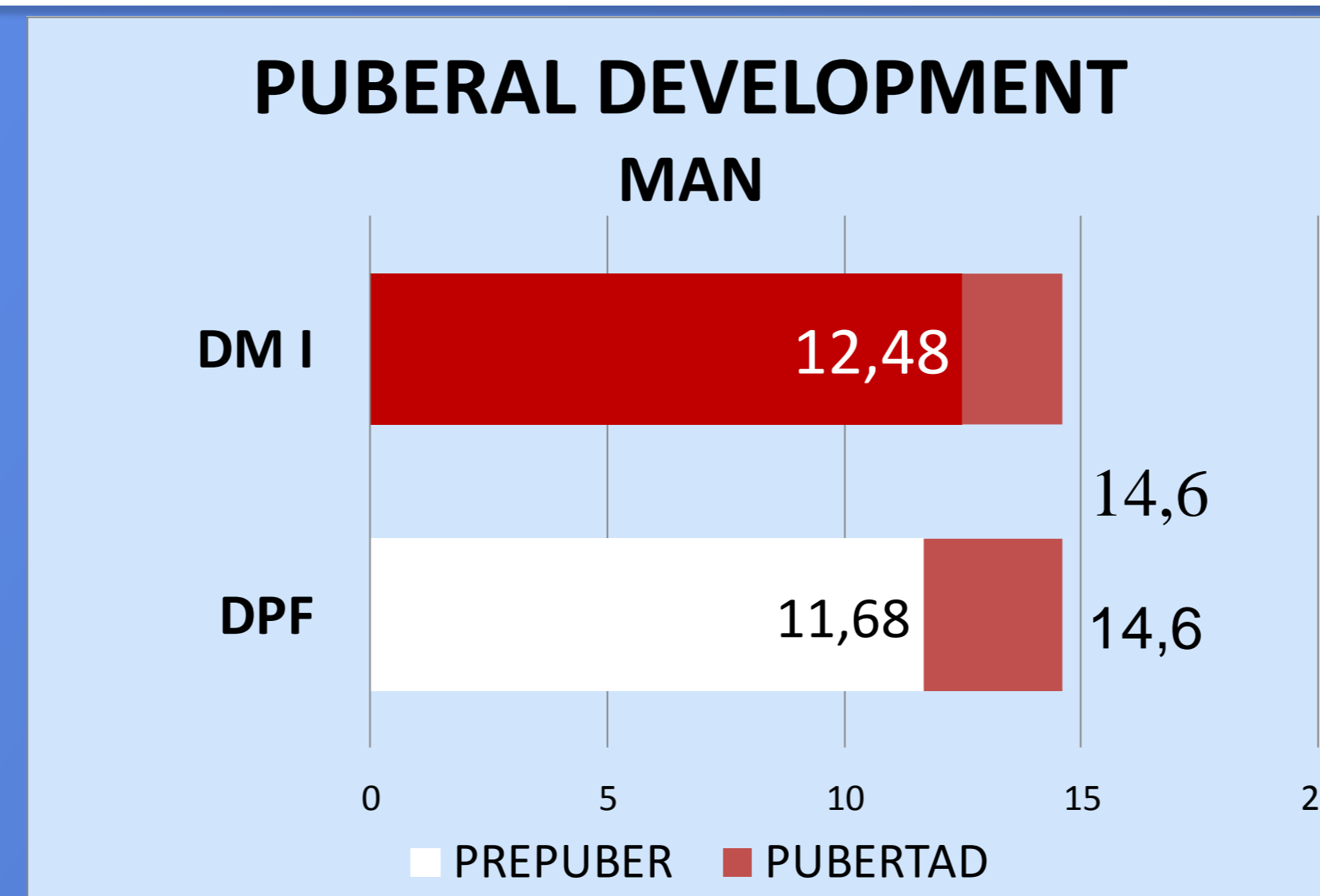
OBJETIVES: To study the pubertal development in our population with DM1 and final somatometric variables reached in relation to the normal population.

MATERIAL and METHODS:

Retrospective study of DM1A debut from diagnosis to final height. Inclusion: Historical Unit Patients from 1973 to 2000 DMtipo1a . Exclusion: other DM , no final height or V. Tanner Studio and bilateral Student t - test Samples T IBM SPSS 18.0 . Comparative longitudinal half somatometry Orbeagozo 2004 (OL) to final height. Pubertal development Ferrandez 2002 (DPF).

RESULTS:

82 cases initially selected
Man: 38 (46%) Woman: 44 (54%)
Average Age at debut: 8,24 y (0,3-15)
Average BMI at debut: 16,98 kg/m ² (-0,2 SDS)
Average tall at debut: 132 cm (+0,3 SDS)
Average HbA1c at debut: 11,11% (8-15,5)
Man: 10,79% Woman: 11,87% } <i>p0,032</i>
Average Tanner stage at debut: I
Average study during (years): 9,6
Average age pass to adults (years): 17,91
Average HbA1c: 7,30% (5,8-9,6) (No sex differences)



To start T2 ♂ mean age 12.48 years, SD 1.2 (+0.8 years for PDF p : 0.02) and T5 14.60 years (like PDF) . Final height reached 174.33 , gain +2.8 cm. TD regarding size and equivalent to OL . 23.48Kg/m² BMI (Z -score +0.51 SDS respect OL p : 0.001)

To start T2 ♀ mean age 10.49 years, SD 1.1 (-0.2 years for PDF p : 0.45) and menarche at 13.31 years (+0.7 years for PDF p : 0.02) . Final height reached 161.74 , gain +2.5 cm. TD respect and respect OL +1.0 cm p : 0.010 . BMI 23.59 kg/m² (Z -score +0.85 SDS regarding OL p : 0.001) .

CONCLUSIONS:

DM1 children start puberty a little later, ending an age and final height equivalent to normal population , but there is more tendency to be overweight , perhaps influenced by insulin therapy . Girls enter telarquia a normal age but more than half year delay menarche, finishing in a normal size but with tendency to overweight.