

## Supplementary material

**Table S1.** Comparison of metabolic data between groups with and without MS

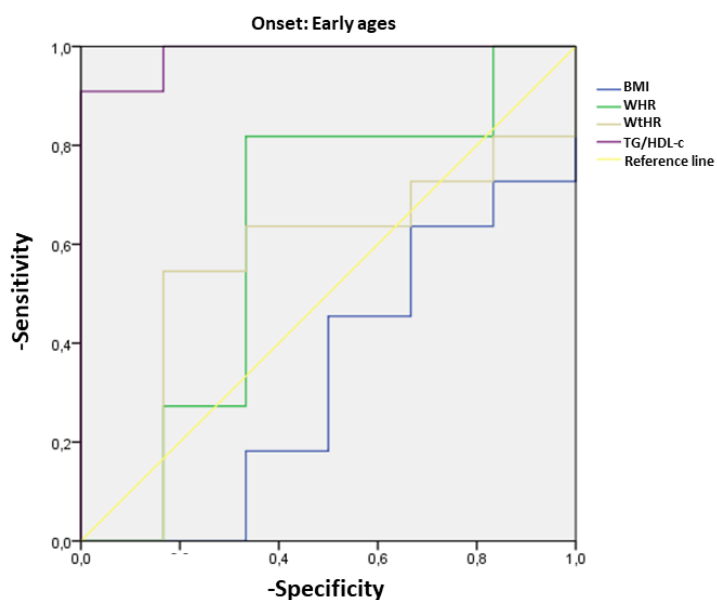
Variable	Without SM (n=11)	With SM (n=36)	p	Effect Size
Age (Years)	36.73±7.74	41.89±8.62	0.083	0.630
Weight (kg)	126.81±23.88	120.82±15.56	0.30	0.297
Height (m)	1.60±0.049	1.58±0.062	0.53	0.036
BMI (kg/m <sup>2</sup> )	49.50±8.65	48.04±6.121	0.5	0.033
WC (cm)	128.63±16.15	131.63±11.10	0.48	0.216
HC (cm)	147.21±17.11	144.64±12.35	0.58	0.172
WHR	0.877±0.094	0.911±0.055	0.14	0.441
Glucose (mg/dL)	91.45±5.37	121.61±53.33	0.07	0.795
HOMA-IR	5.19±2.59	<b>7.63±3.91</b>	<b>0.05*</b>	0.735
HBA1c	5.73±0.23	6.49±1.44	0.09	0.737
TG (mg/dL)	92.64±24.91	<b>162.31±65.65</b>	<b>0.001*</b>	1.403
HDL (mg/dL)	<b>53±12.36</b>	44.89±9.01	<b>0.02*</b>	4.101
TG/HDL-c	1.80±0.54	<b>3.87±1.89</b>	<b>0.001*</b>	1.489
PCR	1.13±1.03	1.25±1.03	0.72	0.116

BMI: Body Mass Index; WC: Waist circumference; HC: hip circumference; HOMA-IR: homeostasis model assessment of insulin resistance; WHR: Waist-to-hip ratio; HBA1c: Glycolated Hemoglobin; TG: triglycerides; HDL-c: High Density Lipoprotein; \* General Linear Model (GLM).

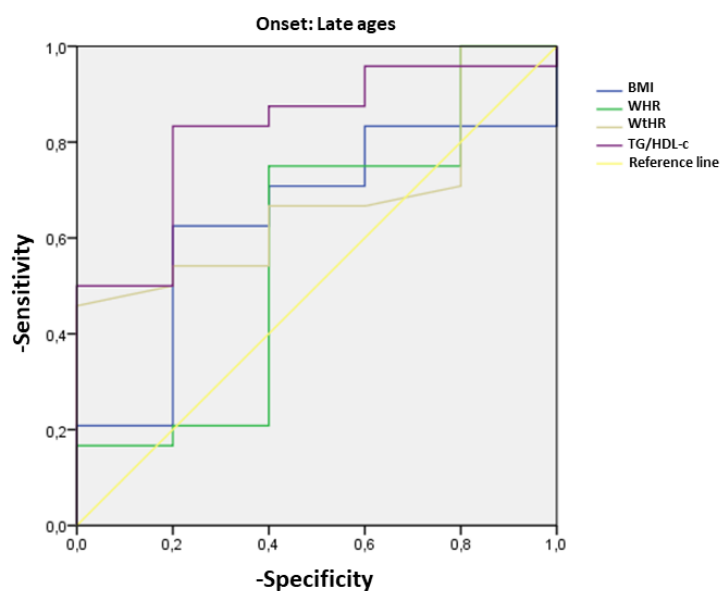
**Table S2.** Association of TG/HDL-c ratio with the phase of life at obesity onset and Metabolic Syndrome.

	With MetS	Without MetS	p	p (Adjusted for DM2)
Early ages (TG/HDL-c ratio)	3.96	1.58	0.009	0.018
Late ages (TG/HDL-c ratio)	3.70	2.06	0.080	0.234

MetS: Metabolic Syndrome; DM2: Type 2 Diabetes mellitus. Early ages: ≤18 years; Late ages: >18 years. General Linear Model (GLM), p≤0.05.

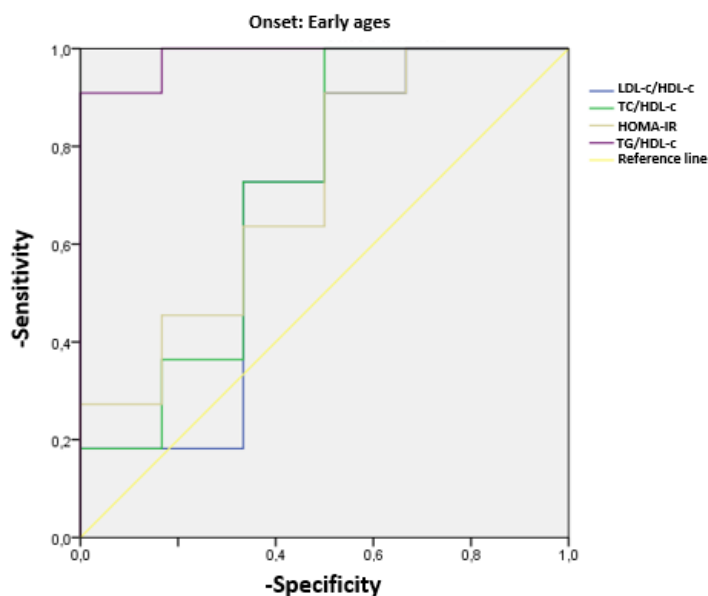


BMI	p= 0.269	AUC=0.333
WHR	p=0.421	AUC=0.621
WtHR	p=0.688	AUC=0.561
<b>TG/HDL-c</b>	<b>p=0.001</b>	<b>AUC= 0.985</b>

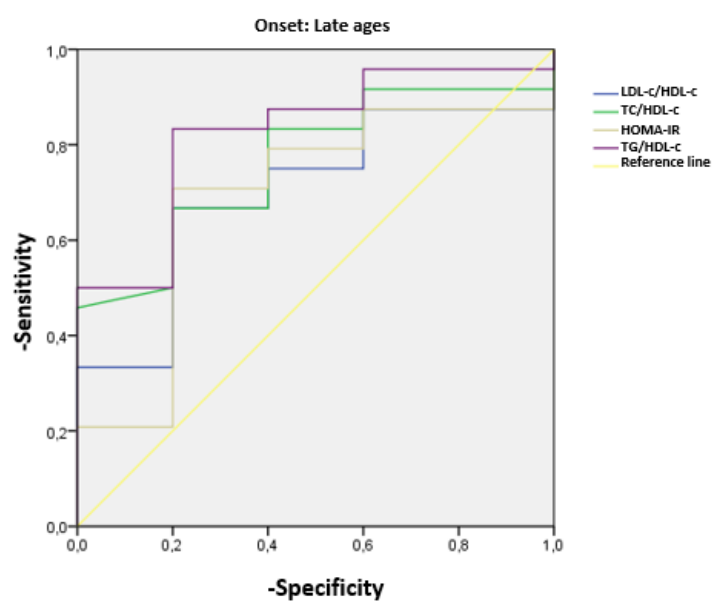


BMI	p= 0.326	AUC=0.642
WHR	p=0.603	AUC=0.575
WtHR	p=0.225	AUC=0.675
<b>TG/HDL-c</b>	<b>p=0.024</b>	<b>AUC= 0.825</b>

**Figure S1.** Comparison of TG/HDL-c ratio with Body Mass Index (BMI), Waist-to-Hip ratio (WHR) and Waist-to-height ratio (WtHR).



LDL-c/HDL-c	p=0.269	AUC=0.667
TC/HDL-c	p=0.159	AUC=0.712
HOMA-IR	p=0.712	AUC=0.159
<b>TG/HDL-c</b>	<b>p=0.001</b>	<b>AUC=0.985</b>



LDL-c/HDL-c	p=0.166	AUC=0.700
TC/HDL-c	p=0.069	AUC=0.763
HOMA-IR	p=0.164	AUC=0.682
<b>TG/HDL-c</b>	<b>p=0.024</b>	<b>AUC=0.825</b>

**Figure S2.** Comparison of TG/HDL-c ratio with Low-density lipoprotein to high density lipoprotein (LDL-c/HDL-c), Total Cholesterol to high-density lipoprotein (TC/HDL-c) and Homeostasis Model Assessment-Insulin Resistance (HOMA-IR).