

**Supplementary material - Table 1 – Participants characteristics at baseline.**

Characteristics	Placebo (n = 22)	Green Tea (n = 24)	Metformin (n = 23)	Green Tea + Metformin (n = 19)
Age (years)	42.4 ± 1.90	39.26 ± 2.41*	41.30 ± 1.96	40.2 ± 2.02
Weight (Kg)	88.10 ± 1.72	84.08 ± 1.74	86.71 ± 1.80	89.02 ± 1.89
BMI (Kg/m <sup>2</sup> )	35.69 ± 0.62	34.60 ± 0.65	35.39 ± 0.67	35.96 ± 0.70
Waist circumference (cm)	103.68 ± 1.45	102.06 ± 1.57	102.61 ± 1.57	102.35 ± 1.72
Lean mass (Kg)	42.62 ± 0.91	40.81 ± 0.93	43.02 ± 0.95	42.48 ± 0.99
Fat mass (Kg)	40.75 ± 1.12	39.39 ± 1.18	39.79 ± 1.21	42.05 ± 1.27
Fasting glucose (mg/dL)	90.54 ± 2.01	90.60 ± 2.10	89.11 ± 2.17	91.14 ± 2.41
HbA1c (%)	6.00 ± 0.21	5.38 ± 0.22	5.32 ± 0.22	5.62 ± 0.24
Insulin (mg/dL)	12.92 ± 1.03	14.08 ± 1.07	12.27 ± 1.08	12.10 ± 1.21
iHOMA-IR	2.87 ± 0.25	3.16 ± 0.25	2.68 ± 0.26	2.65 ± 0.31
iHOMA-β	194.44 ± 19.55	196.36 ± 20.65	202.52 ± 20.73	190.03 ± 22.44
Total cholesterol (mg/dL)	197.50 ± 7.38	201.21 ± 7.67	183.80 ± 7.96	196.31 ± 8.34
HDL-c (mg/dL)	44.81 ± 2.16	48.24 ± 2.25	45.60 ± 2.34	47.36 ± 2.45
LDL-c (mg/dL)	119.50 ± 6.02	125.26 ± 6.09	111.19 ± 6.33	124.61 ± 6.63
VLDL-c (mg/dL)	29.46 ± 2.47	27.94 ± 2.57	27.87 ± 2.66	25.38 ± 2.79
Triglycerides (mg/dL)	147.28 ± 12.33	139.37 ± 12.83	139.63 ± 13.31	126.67 ± 13.95

Data expressed in mean ± standard error (se). Means were adjusted by the method of least squares. \*p < 0.05. BMI: Body Mass Index; HbA1c: glycated hemoglobin; iHOMA-IR: Homeostasis Model Assessment-Insulin Resistance index; RSMM: Relative Skeletal Muscle Mass; iHoma-β: Homeostasis Model Assessment-β index <sup>(22)</sup>.

**Supplementary material – Table 2 – Green tea analysis report provided by Pharmanostra®**

Raw material		Green Tea 50%			Page 1
Origin		China	Analysis date		06/06/2014
Pharmanostra's batch		14031670C	Manufacturer's batch		CMLC20131125
Manufacturing date		Nov/2013	Expiration date		Nov/2016
Storage conditions		Environmental temperature			
Observation 1	Common name: Green tea				
Observation 2	Scientific name: Camellia sinensis				
Observation 3	Part used: leaf				
Issue date	27/08/2014	Invoice	6-043.111	Fractionation order	3508-14
<b>TESTS</b>		<b>SPECIFICATIONS</b>			<b>RESULTS</b>
Description*		Fine yellowish-brown powder, with a characteristic odor.			Fine yellowish-brown powder, with a characteristic odor.
Identification		HPTLC			According to
Loss due to dissection*		≤ 5,0% (constant weight/105°C)			2,10%
Total ash*		≤ 10,0%			0,97%
Granulometry		≥ 95% granulometric sieve			According to
Arsenic		≤ 2.0 mg/Kg			0.0785 mg/Kg
Lead		≤ 3.0 mg/Kg			0.1093 mg/Kg
Bulk density*		With compression 60 – 90 g/100mL Without compression 40 – 60 g/100mL			63 g/100mL 46 g/100mL
Cadmium		≤ 1.0 mg/Kg			< 0.01 mg/Kg
Mercury		≤ 0.1 mg/Kg			0.0279 mg/Kg
Residual solvents*		Methanol ≤ 3000 ppm Ethanol ≤ 5000 ppm			98,97 ppm 162,49 ppm
Content*		Polyphenols ≥ 50%			55,76%
Residual pesticides		According to			According to
<b>MICROBIOLOGICAL TESTS</b>					
Total bacteria count*		≤ 10000 CFU/g			< 10 CFU/g
Fungi and yeast*		≤ 1000 CFU/g			< 10 CFU/g
Escherichia coli*		Negative			Negative
Salmonella*		Negative			Negative

\* Results obtained from analyzes carried out at the Quality Control Laboratory SM EMPREENDIMENTOS FARMACÊUTICOS LTDA. And the other results were transcribed according to the manufacturer's certificate of analysis.

Extraction solvent: ethanol and water.