

## Appendix

### Supplementary material

**Table A1:** Parameters of glucose and lipid of drug-naïve, first-episode patients with psychosis and healthy controls in a tertiary center in Greece ( $N=54$ )\*\*

Parameters of lipid metabolism	Baseline (before treatment)	Healthy controls	Statistic	Effect size
Total cholesterol [Mean (std.dev)]	172.24mg/dl (42.14)	177 mg/dl (26.15)	$t^a = 0.705$ $p=0.482$	<i>Cohen's d</i> = 0.136
Triglycerides [Median (range)]	79.5 mg/dl(41-369)	53.5 mg/dl(42-165)	$U^b = 826$ , $p<0.001$	<i>eta-sq</i> = 0.14
HDL [Median (range)]	48.5mg/dl (29-65)	56.5 mg/dl(39-78)	$U^b = 766.5$ , $p<0.001$	<i>eta-sq</i> = 0.167
Parameters of glucose metabolism				
Fasting glucose [Median (range)]	89mg/dl (70-110)	85mg/dl (69-99)	$U^b = 1184$ , $p=0.092$	<i>eta-sq</i> = 0.026
Fasting insulin [Median (range)]	7.7 IU/ml (1.9-79.3)	4.9 IU/ml (2-13.8)	$U^b = 759.5$ , $p<0.001$	<i>eta-sq</i> = 0.171
Fasting C-peptide [Median (range)]	2.81 ng/ml (0.9-14)	1.5 ng/ml (0.8-3.3)	$U^b = 746.5$ , $p<0.001$	<i>eta-sq</i> = 0.177
HbA1c [Median (range)]	5.09% (4.3-6.1)	5.1% (4.6-5.5)	$U^b = 1417.5$ , $p=0.803$	<i>eta-sq</i> = 0.001
HOMA-IR [Median (range)]	1.69 (0.33-19.19)	1.04(0.43-3.34)	$U^b = 728$ , $p<0.001$	<i>eta-sq</i> = 0.186

<sup>a</sup>Independent samples *t*-test;

<sup>b</sup>Mann-Whitney test.

\*\* Please note that baseline data for a subset of these patients ( $N=17$ \*\*) have been reported in Petrikis et al. (2015)

**Table A2:** Parameters of glucose and lipid of drug-naïve, first-episode patients with psychosis, after 3 years of treatment and healthy controls in a tertiary center in Greece

Parameters of lipid metabolism	After 3 years of treatment	Healthy controls	Statistic	Effect size
Total cholesterol [Mean (std.dev)]	216.89 mg/dl (53.10)	177.46 mg/dl (26.79)	$t^a = 4.698$ $p < 0.001$	<i>Cohen's d</i> = 0.938
Triglycerides [Median (range)]	134 mg/dl(51-578)	59 mg/dl (39-110)	$U^b = 227.5$ , $p < 0.001$	<i>eta-sq</i> = 0.364
HDL [Median (range)]	46 mg/dl (28-68)	51 mg/dl (23-165)	$U^b = 602.5$ , $p < 0.001$	<i>eta-sq</i> = 0.032
Parameters of glucose metabolism				
Fasting glucose [Median (range)]	99 mg/dl (76-115)	85mg/dl (69-99)	$U^b = 346$ , $p < 0.001$	<i>eta-sq</i> = 0.22
Fasting insulin [Median (range)]	13.2 IU/ml (3.7-105.4)	4.9 IU/ml (2-13.8)	$U^b = 264$ , $p < 0.001$	<i>eta-sq</i> = 0.316
Fasting C-peptide [Median (range)]	3.5 ng/ml (1.1-14.4)	1.5 ng/ml (0.8-3.6)	$U^b = 229.5$ , $p < 0.001$	<i>eta-sq</i> = 0.361
HbA1c [Median (range)]	5.3% (4.5-7)	5.1% (4.6-6.2)	$U^b = 740.5$ , $p = 0.015$	<i>eta-sq</i> = 0.001
HOMA-IR [Median (range)]	2.98 (0.80-29.10)	1.04(0.43-3.34)	$U^b = 235$ , $p < 0.001$	<i>eta-sq</i> = 0.354

<sup>a</sup>Independent samples *t*-test;

<sup>b</sup>Mann-Whitney test.

**Table A3:** Comparison of the parameters of glucose and lipid among that treated patients with Risperidone and patients that treated with Olanzapine, after 6 months of treatment (N=54)

Parameters of lipid metabolism	Risperidone (N=25)	Olanzapine (N=29)	Statistic	Effect size
Total cholesterol [Median (range)]	201 mg/dl (133-311)	194 mg/dl (126-371)	$U^a=359$ , $p=0.958$	$eta-sq=0.00005$
Triglycerides [Median (range)]	92 mg/dl (45 - 217)	116 mg/dl (50-339)	$U^a =268$ , $p=0.101$	$eta-sq= 0.051$
BMI <sup>b</sup> [mean (SD <sup>c</sup> )]	23.91 kg/m <sup>2</sup> (2.45)	25.20 kg/m <sup>2</sup> (3.44)	$t^d=-1.56$ , $p=0.124$	$Cohen's d = 0.427$
HDL [Mean (SD <sup>c</sup> )]	48.60 mg/dl (9.46)	45.00 mg/dl (8.49)	$t^d=1.47$ , $p=0.147$	$Cohen's d = 0.402$
Parameters of glucose metabolism				
Fasting glucose [Mean (SD <sup>c</sup> )]	87.00 mg/dl (8.33)	90.03 mg/dl (10.92)	$t^d=-1.13$ , $p=0.262$	$Cohen's d = 0.309$
Fasting insulin [Median (range)]	6.90 $\mu$ IU/ml (2.30-75.00)	10.00 $\mu$ UI/ml (3.40, 48.00)	$U^a =301.5$ , $p=0.290$	$eta-sq= 0.021$
Fasting C-peptide [Median (range)]	2.10 ng/ml (1.00-7.10)	3.50 ng/ml(1.10-14.30)	$U^a =255.5$ , $p=0.063$	$eta-sq= 0.064$
HbA1c [Mean (SD <sup>c</sup> )]	5.16% (0.29)	5.04% (0.35)	$t^d=1.29$ , $p=0.202$	$Cohen's d = 0.371$
HOMA-IR [Median (range)]	1.59 (16.11-29.00)	2.36 (0.54-12.80)	$U^a =296.5$ , $p=0.252$	$eta-sq= 0.024$

<sup>a</sup>Mann-Whitney test

<sup>b</sup>BMI: Body Mass Index

<sup>c</sup>SD: Standard deviation;

<sup>d</sup>Independent samples t-test

**Table A4:** Comparison of the parameters of glucose and lipid among that treated patients with Risperidone and patients that treated with Olanzapine, after 3 years of treatment (N=39)

Parameters of lipid metabolism	Risperidone (N=14)	Olanzapine (N=25)	Statistic	Effect size
Total cholesterol [Median (range)]	206 mg/dl (187-327)	205 mg/dl (131-366)	$U^a = 143$ , $p = 0.349$	$\eta^2 = 0.023$
Triglycerides [Median (range)]	178 mg/dl (48 - 443)	125 mg/dl (41 -578)	$U^a = 143.5$ , $p = 0.356$	$\eta^2 = 0.022$
BMI <sup>b</sup> [mean (SD <sup>c</sup> )]	26.01 kg/m <sup>2</sup> (3.20)	25.85 kg/m <sup>2</sup> (2.67)	$t^d = 0.16$ , $p = 0.867$	Cohen's $d = 0.056$
HDL [Mean (SD <sup>c</sup> )]	46.29 mg/dl (10.75)	45.68 mg/dl (9.60)	$t^d = 0.18$ , $p = 0.857$	Cohen's $d = 0.039$
Parameters of glucose metabolism				
Fasting glucose [Mean (SD <sup>c</sup> )]	99.21 mg/dl (9.09)	97.04 mg/dl (10.50)	$t^d = 0.64$ , $p = 0.520$	Cohen's $d = 0.216$
Fasting insulin [Median (range)]	14.50 $\mu$ IU/ml (4.10-105.40)	10.80 $\mu$ UI/ml (3.70, 104.60)	$U^a = 141.5$ , $p = 0.327$	$\eta^2 = 0.025$
Fasting C-peptide [Median (range)]	3.80 ng/ml (1.20 - 8.90)	3.20 ng/ml(1.10-14.40)	$U^a = 141$ , $p = 0.319$	$\eta^2 = 0.025$
HbA1c [Median (range)]	5.30% (5.10 -7.00)	5.30% (4.50-6.20)	$U^a = 136$ , $p = 0.249$	$\eta^2 = 0.033$
HOMA-IR [Median (range)]	3.74 (0.91-28.63)	2.59 (0.80-29.10)	$U^a = 146$ , $p = 0.396$	$\eta^2 = 0.018$

<sup>a</sup>Mann-Whitney test

<sup>b</sup>BMI: Body Mass Index

<sup>c</sup>SD: Standard deviation;

<sup>d</sup>Independent samples t-test