

Supplementary Material

Antipsychotic treatment reduces indices of oxidative stress in first episode psychosis patients

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The following oxidative stress markers and other measured variables were included in Spearman's rank correlation analysis: serum total antioxidant capacity (TAC), total level of peroxides (TPX), oxidative stress index (OSI), methionine (Met), oxidized methionine (Met-SO), ratio oxidized methionine to methionine (Met-SO/Met), pro- and anti-inflammatory cytokines of the interleukin family (IL-1 α , IL-1 β , IL-2, IL-4, IL-6, IL-8, IL-10), interferon gamma (IFN γ), vascular endothelial growth factor (VEGF), endothelial growth factor (EGF), tumour necrosis factor-alpha (TNF- α), body mass index (BMI), and Positive and Negative Syndrome Scale (PANSS) total score. Supplementary tables 1-2 demonstrate only significant correlation coefficients of the above-mentioned parameters with OxS markers (TAC, TPX, OSI) in antipsychotic-naïve FEP patients' group. Supplementary tables 3-5 present only significant negative or positive correlation coefficients of the above-mentioned parameters with OxS markers (TAC, TPX, OSI) in FEP patients' group after 7-months treatment with antipsychotics.

Supplementary Table 1: Significant correlation coefficients between total level of peroxides (TPX) and measured parameters in antipsychotic-naïve first-episode psychosis (FEP) patients.

Parameters	Spearman ρ	p -value
BMI	0,26	0,03
IL-1 β	0,26	0,03
EGF	0,30	<0,01
OSI	0,90	<0,0000001

BMI: body mass index; IL-1 β : interleukin 1 beta; EGF: endothelial growth factor; OSI: oxidative stress index.

Supplementary Table 2: Significant correlation coefficients between serum total antioxidant capacity (TAC) and measured parameters in antipsychotic-naïve first-episode psychosis (FEP) patients.

Parameters	Spearman ρ	p -value
TNF α	0,26	0,03
IL-1 α	0,24	0,04

IL-1 β	0,25	0,04
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TNF- α : tumour necrosis factor alpha; IL-1 α : interleukin 1 alpha; IL-1 β : interleukin 1 beta.

Supplementary Table 3: Significant correlation coefficients between oxidative stress index (OSI) and measured parameters in antipsychotic-naïve first-episode psychosis (FEP) patients.

Parameters	Spearman ρ	p -value
BMI	0,23	0,049
EGF	0,24	0,04
TPX	0,90	<0,0000001

BMI: body mass index; EGF: endothelial growth factor; TPX: total level of peroxides.

Supplementary Table 4: Significant correlation coefficients between total antioxidant capacity (TAC) and measured parameters after 7-months antipsychotic treatment, in first-episode psychosis (FEP) patients group.

Parameters	Spearman ρ	p -value
BMI	0,31	<0,01
OSI	-0,31	<0,01

BMI: body mass index; OSI: oxidative stress index.

Supplementary Table 5: Significant correlation coefficients between oxidative stress index (OSI) and measured parameters after 7-months antipsychotic treatment.

Parameters	Spearman ρ	p -value
Treatment	-0,28	0,02
PANSS3	0,24	0,04
IL-6	0,25	0,04
TAC	-0,31	<0,01

Treatment: 7 months of treatment with antipsychotics; PANSS3: general score of psychopathology; IL-6: interleukin 6; TAC: total level of peroxides.