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Supplementary Material

Article Title: Controlled Study of Metabolic Syndrome Among Offspring of Parents With Bipolar Disorder

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LIST OF SUPPLEMENTARY MATERIAL FOR THE ARTICLE

DISCLAIMER

Supplementary Material

Supplementary Table 1. Summary of multivariable statistics in analyses additionally controlling for psychotropic medication.

	Statistic[a]	*p*
Meets criteria for MetS:		
IDF	4.98	0.08
NCEP	6.94	0.03[c,d]*
Mean number of MetS components:		
IDF	10.40	0.006[b,d]*
NCEP	8.35	0.02[b,d]*
Individual MetS components:		
Waist circumference, IDF	5.98	0.05[b,d]*
Waist circumference, NCEP	1.74	0.42
Blood pressure	0.49	0.78
Fasting glucose	0.73	0.69
Triglycerides	5.65	0.06
HDL-C	5.10	0.08
Dimensional cardiometabolic measures:		
Glucose (mg/dl)	0.45	0.64
Total Cholesterol (mg/dl)	0.49	0.62
HDL-C (mg/dl)	1.27	0.28
LDL-C (mg/dl)	0.66	0.52
Triglycerides (mg/dl)	1.38	0.25
Systolic blood pressure (mmHg)	1.10	0.33
Diastolic blood pressure (mmHg)	0.31	0.73
Body mass index (lb/in^2)	2.23	0.11
Body fat %	1.28	0.28
Waist circumference (in)	1.79	0.17
Hip circumference (in)	2.33	0.10

[a]Statistic= F for dimensional variables, χ^2 (2 degrees of freedom) for ordinal variables and for categorical variables. *= Significant difference for α=0.05.

[b,c,d]Post-hoc comparisons: b= control vs affected high-risk offspring; c= control vs unaffected high-risk offspring; d= affected vs unaffected high-risk offspring.

Abbreviations: HDL-C, high-density lipoprotein cholesterol; IDF, international diabetes federation; LDL-C, low-density lipoprotein cholesterol; MetS, metabolic syndrome; NCEP, national cholesterol education programme.

Supplementary Table 2. Summary of multivariable statistics in analyses additionally controlling for second generation antipsychotics.

	Statistic[a]	*p*
Meets criteria for MetS:		
IDF	4.56	0.10
NCEP	6.91	0.03[c]*
Mean number of MetS components:		
IDF	7.92	0.02[b,d]*
NCEP	6.31	0.04[b,d]*
Individual MetS components:		
Waist circumference, IDF	4.96	0.08
Waist circumference, NCEP	1.73	0.42
Blood pressure	0.37	0.83
Fasting glucose	0.47	0.79
Triglycerides	5.62	0.06
HDL-C	2.81	0.25
Dimensional cardiometabolic measures:		
Glucose (mg/dl)	0.42	0.66
Total Cholesterol (mg/dl)	0.73	0.48
HDL-C (mg/dl)	0.41	0.67
LDL-C (mg/dl)	0.67	0.52
Triglycerides (mg/dl)	1.48	0.23
Systolic blood pressure (mmHg)	1.29	0.28
Diastolic blood pressure (mmHg)	0.32	0.73
Body mass index (lb/in^2)	2.04	0.13
Body fat %	1.21	0.30
Waist circumference (in)	1.72	0.18
Hip circumference (in)	2.26	0.11

[a]Statistic= F for dimensional variables, χ^2 (2 degrees of freedom) for ordinal variables and for categorical variables. *= Significant difference for α=0.05.

[b,c,d]Post-hoc comparisons: b= control vs affected high-risk offspring; c= control vs unaffected high-risk offspring; d= affected vs unaffected high-risk offspring.

Abbreviations: HDL-C, high-density lipoprotein cholesterol; IDF, international diabetes federation; LDL-C, low-density lipoprotein cholesterol; MetS, metabolic syndrome; NCEP, national cholesterol education programme.

Supplementary Table 3. Sensitivity analyses excluding 18 offspring taking second-generation antipsychotics.

	Affected high-risk offspring[a] (n=69)	Unaffected high-risk offspring[a] (n=112)	Control offspring[a] (n=130)	Statistic[b]	*p*	Effect size[c]
Meets criteria for MetS:						
IDF	14 (20.3)	10 (9.0)	19 (14.8)	4.65	0.10	0.12
NCEP	9 (13.0)	6 (5.4)	19 (14.6)	5.70	0.06	0.14
Mean number of MetS components:						
IDF	1.6±1.1	1.2±1.0	1.3±1.2	6.82	0.03[d,f]*	0.02
NCEP	1.3±1.0	1.0±1.0	1.1±1.1	5.33	0.07	0.01
Individual MetS components:						
Waist circumference, IDF	34 (49.3)	36 (32.4)	44 (34.4)	5.83	0.05[d,f]*	0.14
Waist circumference, NCEP	15 (21.7)	15 (13.5)	22 (17.2)	2.07	0.36	0.08
Blood pressure	13 (19.1)	21 (18.8)	26 (20.5)	0.12	0.94	0.02
Fasting glucose	9 (13.2)	14 (12.5)	14 (10.9)	0.26	0.88	0.03
Triglycerides	15 (21.7)	12 (10.7)	23 (18.0)	4.34	0.11	0.12
HDL-C	38 (55.1)	49 (43.8)	56 (43.8)	2.76	0.25	0.10
Dimensional cardiometabolic measures:						
Glucose (mg/dl)	90.4±9.4	88.7±13.2	89.1±15.6	0.33	0.72	0.002
Total Cholesterol (mg/dl)	164.1±33.8	158.6±30.1	161.7±31.8	0.68	0.51	0.004
HDL-C (mg/dl)	46.4±14.6	47.3±12.8	48.1±13.2	0.34	0.72	0.002
LDL-C (mg/dl)	95.8±24.4	92.3±25.2	96.5±27.2	0.75	0.47	0.01
Triglycerides (mg/dl)	107.5±53.8	95.8±60.9	97.6±56.4	0.96	0.38	0.01
Systolic blood pressure (mmHg)	117.4±12.2	117.2±14.3	119.9±17.5	1.11	0.33	0.01
Diastolic blood pressure (mmHg)	73.6±10.5	72.6±9.8	73.4±11.5	0.25	0.78	0.002
Body mass index (lb/in^2)	26.5±6.5	24.6±7.0	25.7±7.5	1.57	0.21	0.01
Body fat %	28.2±11.7	25.5±11.8	25.8±11.1	1.32	0.27	0.01
Waist circumference (in)	33.3±5.6	31.7±6.0	32.5±7.3	1.39	0.25	0.01
Hip circumference (in)	41.6±5.8	39.9±5.6	40.3±5.9	1.98	0.14	0.01

[a]Values for all continuous and ordinal variables are written as mean ± standard deviation, categorical variables are written as n (% within group).

[b]Statistic= F for dimensional variables, H (2 degrees of freedom) for ordinal variables, or χ^2 for categorical variables. *= Significant difference at α=0.05.

[c]Effect Size = partial η^2 for F and H test, or Cramer's V for χ^2 test.

[d,e,f]Post-hoc comparisons: d= control vs affected high-risk offspring; e= control vs unaffected high-risk offspring; f= affected vs unaffected high-risk offspring.

Abbreviations: HDL-C, high-density lipoprotein cholesterol; IDF, international diabetes federation; LDL-C, low-density lipoprotein cholesterol; MetS, metabolic syndrome; NCEP, national cholesterol education programme.