

Supplementary Table 2. Multivariate analysis of covariance using magnetic resonance spectroscopy absolute metabolites values in the anterior cingulate as dependent variables and age, gender, group, Bcl-2 genotype, group*Bcl-2 genotype interaction as covariates.

Covariate	Dependent Variable	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
age	Glu	1	0.11	0.15	0.701	0.2%	6.7%
	Myo	1	1.44	3.15	0.080	4.2%	41.7%
	NAA	1	2.25	2.10	0.152	2.8%	29.8%
	Cre	1	5.82	3.89	0.053	5.1%	49.4%
	Cho	1	0.95	0.45	0.506	0.6%	10.1%
	Glx	1	0.06	0.05	0.826	0.1%	5.5%
gender	Glx/Glu	1	0.01	1.98	0.164	2.7%	28.4%
	Glu	1	7.40	9.79	0.003	12.0%	87.0%
	Myo	1	1.41	3.07	0.084	4.1%	40.9%
	NAA	1	1.71	1.60	0.211	2.2%	23.8%
	Cre	1	6.11	4.08	0.047	5.4%	51.4%
	Cho	1	2.62	1.23	0.272	1.7%	19.4%
group	Glx	1	6.31	4.76	0.032	6.2%	57.6%
	Glx/Glu	1	0.00	0.91	0.343	1.2%	15.6%
	Glu	1	4.51	5.97	0.017	7.7%	67.4%
	Myo	1	0.50	1.10	0.299	1.5%	17.8%
	NAA	1	13.27	12.38	0.001	14.7%	93.5%
	Cre	1	1.86	1.24	0.269	1.7%	19.6%
Bcl-2	Cho	1	7.65	3.59	0.062	4.7%	46.4%
	Glx	1	14.26	10.75	0.002	13.0%	89.9%
	Glx/Glu	1	0.03	9.95	0.002	12.1%	87.5%
	Glu	2	1.26	1.67	0.196	4.4%	34.0%
	Myo	2	1.23	2.69	0.075	6.9%	51.7%
	NAA	2	0.60	0.56	0.573	1.5%	14.0%
Bcl-2 * group	Cre	2	0.63	0.42	0.658	1.2%	11.6%
	Cho	2	0.34	0.16	0.855	0.4%	7.3%
	Glx	2	1.07	0.80	0.452	2.2%	18.2%
	Glx/Glu	2	0.00	0.09	0.913	0.3%	6.3%
	Glu	2	3.29	4.35	0.016	10.8%	73.7%
	Myo	2	0.61	1.33	0.271	3.6%	27.8%
	NAA	2	0.91	0.85	0.431	2.3%	19.1%
	Cre	2	0.71	0.47	0.626	1.3%	12.4%
	Cho	2	1.77	0.83	0.441	2.2%	18.7%
	Glx	2	6.14	4.63	0.013	11.4%	76.5%
	Glx/Glu	2	0.004	1.24	0.295	3.3%	26.2%

caption: Glu= glutamate; Myo= myo-inositol; NAA= N-acetylaspartate; Cre=creatine phosphocreatine; Cho= choline compounds; Glx= glutamate+glutamine. significance level p<0.05