

**Supplementary Table 1.** Type of antipsychotic medication and number of patients with schizophrenia

<i>Antipsychotics</i>	<i>Prolactin-raising antipsychotic (Y/N)</i>	<i>Males (n=59)</i>	<i>Females (n=38)</i>
<i>Second generation antipsychotics</i>			
amisulpride	Y	4	0
aripiprazole	N	0	4
clozapine	N	15	7
olanzapine	N	8	3
paliperidone	Y	3	2
quetiapine	N	3	1
risperidone	Y	5	5
ziprasidone	N	0	3
amisulpride/clozapine	Y	4	2
amisulpride/quetiapine	Y	0	1
amisulpride/risperidone	Y	1	0
aripiprazole/clozapine	N	2	1
aripiprazole/asenapine	N	1	0
clozapine/paliperidone	Y	1	1
clozapine/risperidone	Y	2	0
olanzapine/paliperidone	Y	0	1
olanzapine/risperidone	Y	1	0
paliperidone/quetiapine	Y	0	2
quetiapine/risperidone	Y	1	1
quetiapine/ziprasidone	N	1	0
<i>Second and first generation antipsychotics</i>			
clozapine/haloperidol	Y	1	0
clozapine/chlorpromazine	Y	1	0
olanzapine/zuclophenithixol	Y	1	0
quetiapine/zuclophenithixol	Y	2	1
<i>First generation antipsychotics</i>			
Flupentixol	Y	0	1
haloperidol	Y	0	1
zuclophenithixol	Y	2	1

Prolactin-raising antipsychotics: amisulpride, chlorpromazine, haloperidol, flupentixol, paliperidone, risperidone, zuclophenithixol; prolactin-sparing antipsychotics: aripiprazole, asenapine, clozapine, quetiapine fumerate, olanzapine, ziprasidone. Total number of participants receiving any prolactin-raising medication is 30 males and 19 females. The other 29 male and 19 female participants were receiving one or a combination of prolactin-sparing antipsychotics. Y, yes; N, no.

1 receiving antipsychotics

**Supplementary Table 2.** Mean difference scores of symptom subscale ratings and negative emotional state sc

<i>Measure</i>	<i>Males</i>			
	<i>Short</i>		<i>Long</i>	
	<i>Placebo Mean Difference (SD)</i>	<i>Raloxifene Mean Difference (SD)</i>	<i>Placebo Mean Difference (SD)</i>	<i>Raloxifene Mean Difference (SD)</i>
<i>Parallel</i>				
N	15	9	11	13
<i>DASS</i>				
Depression	1.2 (4.8)	-1.3 (10.5)	-0.9 (5.7)	-2.3 (7.2)
Anxiety	0.5 (5.9)	-1.6 (8.0)	1.1 (4.3)	0.2 (6.6)
Stress	-0.4 (5.4)	-0.7 (6.3)	-0.2 (6.2)	0.8 (9.2)
<i>PANSS</i>				
Positive	-0.7 (1.8)	-1.3 (3.2)	-1.7 (3.0)	-0.7 (3.4)
Negative	0.1 (3.7)	-1.8 (4.2)	-0.6 (1.7)	-0.6 (2.4)
General	-1.1 (3.2)	-3.1 (4.0)	-0.7 (6.0)	-2.1 (4.9)
Total	-1.7 (6.3)	-6.2 (9.0)	-3.1 (9.4)	-3.4 (8.5)
<i>Crossover</i>				
N	21	21	22	22
<i>DASS</i>				
Depression	-0.3 (7.2)	-1.1 (7.4)	-0.9 (9.1)	-2.4 (6.9)
Anxiety	-1.1 (4.7)	-0.8 (6.1)	-0.4 (7.6)	-1.4 (6.2)
Stress	-0.5 (6.4)	-2.4 (4.4)	-0.8 (9.7)	-1.0 (8.3)
<i>PANSS</i>				
Positive	-0.3 (2.1)	-0.9 (2.6)	-0.8 (3.5)	-0.3 (2.4)
Negative	0.4 (3.7)	-1.0 (3.9)	-0.5 (1.7)	-0.6 (3.5)
General	-0.7 (4.1)	-0.7 (4.1)	-1.1 (5.6)	-1.1 (4.4)
Total	-0.6 (8.0)	-2.6 (9.0)	-2.4 (7.8)	-2.3 (8.5)

PANSS, Positive and Negative Syndrome Scale; DASS Depression Anxiety and Stress Scale. Data are mean (s

ores for placebo and raloxifene treatment conditions in schizophrenia patients by CAG repeat

<i>Statistics</i>	<i>Females</i>		
	<i>Short</i>		<i>Long</i>
	<i>Placebo Mean Difference (SD)</i>	<i>Raloxifene Mean Difference (SD)</i>	<i>Placebo Mean Difference (SD)</i>
<i>Two-way ANOVA</i>	5	9	6
F(1,44)=0.08, p=0.78	-2.0 (4.0)	-6.0 (6.9)	-8.7 (16.9)
F(1,44)=0.10, p=0.75	-2.4 (2.6)	-2.4 (6.8)	-7.0 (9.4)
F(1,44)=0.09, p=0.77	-3.2 (5.9)	-4.4 (5.8)	-12.3 (10)
F(1,44)=0.97, p=0.33	-2.4 (1.5)	-0.8 (1.5)	-1.0 (4.2)
F(1,44)=1.09, p=0.30	-1.2 (5.2)	0.6 (2.3)	1.8 (3.54)
F(1,44)=0.06, p=0.82	-4.4 (3.9)	-2.9 (3.7)	-2.8 (4.7)
F(1,44)=0.76, p=0.39	-8.0 (8.5)	-3.1 (5.1)	-2.0 (9.3)
<i>Mixed design ANOVA</i>	12	12	14
F(1,41)=0.02, p=0.88	1.3 (10.8)	-0.7 (7.2)	1.7 (14.3)
F(1,41)=0.20, p=0.66	-0.7 (6.7)	-0.5 (6.5)	-0.4 (7.8)
F(1,41)=0.21, p=0.65	2.5 (12.2)	-1.8 (5.8)	-1.3 (12.7)
F(1,41)=0.56, p=0.46	-1.3 (2.8)	-0.8 (2.1)	1.1 (3.0)
F(1,41)=0.66, p=0.42	-0.8 (3.9)	-0.5 (2.7)	0.4 (3.2)
F(1,41)=0.002, p=0.97	-1.8 (4.6)	-1.8 (3.7)	-1.6 (4.9)
F(1,41)=0.35, p=0.56	-3.9 (9.2)	-3.0 (6.4)	-0.2 (8.2)

standard deviation).

length group.

<i>mg</i>	<i>Statistics</i>
<i>Raloxifene Mean Difference (SD)</i>	<i>Treatment x CAG group</i>
	<i>Two-way ANOVA</i>
9	
-2.2 (6.6)	F(1,25)=2.09, p=0.16
-1.3 (9.5)	F(1,25)=0.89, p=0.36
-2.2 (9.8)	F(1,25)=3.26, p=0.08
-0.8 (1.3)	F(1,25)=0.65, p=0.43
-0.7 (3.2)	F(1,25)=2.63, p=0.12
-0.9 (5.2)	F(1,25)=0.02, p=0.90
-2.3 (8.1)	F(1,25)=0.79, p=0.38
	<i>Mixed design ANOVA</i>
14	
-1.3 (8.1)	F(1,24)=0.02, p=0.89
-1.4 (7.8)	F(1,24)=0.06, p=0.80
<0.001 (9.4)	F(1,24)=0.71, p=0.41
0.4 (2.8)	F(1,24)=0.46, p=0.50
-0.5 (2.6)	F(1,24)=0.29, p=0.60
1.5 (5.7)	F(1,24)=0.86, p=0.36
1.4 (9.2)	F(1,24)=0.01, p=0.91