Supplementary Methods

Materials and Methods

Human subjects

Brain specimens were obtained during autopsies conducted at the Allegheny County Office of the Medical Examiner (Pittsburgh, PA) following consent from next-of-kin. An independent committee of experienced research clinicians made consensus DSM-IV diagnoses (American Psychiatric Association, 2000) for each subject using structured interviews with family members and review of medical records(1, 2). The same approach was used to confirm the absence of psychiatric diagnoses in comparison subjects. In order to control for experimental variance, subjects with schizophrenia or schizoaffective disorder (N=62) were matched individually to one unaffected comparison subject for sex and as closely as possible for other measures (see Table S1 for individual subject details).

Laser Microdissection Procedure

The right hemisphere of each brain was blocked coronally, frozen and stored at -80°C. Frozen tissue blocks containing the middle portion of the right superior frontal sulcus were confirmed to contain DLPFC area 9 using Nissl-stained sections for each subject. For all procedures, samples from each subject in a given pair were processed together in order to control for experimental variance. Tissue sections (12 µm) containing DLPFC area 9 were cut on a cryostat, mounted on glass polyethylene naphthalate membrane slides (Leica Microsystems, Bannockburn, IL, USA) that were previously treated with ultraviolet light at 254 nm for 30 minutes, which were blinded to diagnosis, and stained with thionin for Nissl substance. We used the Leica laser microdissection system (LMD6500) to dissect DLPFC layer

3 and 5 pyramidal cells, and used the same technique to dissect layer 3 parvalbumin interneurons as described(3-5).

Microarray Analyses

For each sample, the RNA from the resulting pools of individually dissected pyramidal and parvalbumin cells was extracted using the QIAGEN RNeasy Plus Micro Kit, transcribed into cDNA, subjected to a single round of amplification using the Ovation Pico WTA System (NuGEN Technologies, Inc, San Carlos, California) and labeled using the Encore Biotin module. These samples were then loaded on an Affymetrix GeneChip® HT HG-U133+ PM Array plate (Affymetrix, Santa Clara, CA) designed to assess transcript levels from the human genome.

Quantitative Polymerase Chain Reaction

For each subject in the full cohort (N=62 pairs), the gray white matter boundary in each tissue block containing DLPFC area 9 was carefully scored with a scalpel blade where the gray matter had uniform thickness and was cut perpendicular to the pial surface. Standardized dilutions of total RNA (10 ng/μl) were used to synthesize complementary DNA (cDNA) for each subject using a High Capacity cDNA Reverse Transcription Kit (Life Technologies, Carlsbad, CA). All primer sets (Table S2) demonstrated high amplification efficiency across a wide range of cDNA dilutions and specific single products in dissociation curve analyses. Individual standard curve analysis was performed for each primer set using a range of four different cDNA dilutions and was used to determine the slope. The primer efficiency for each transcript is computed using the formula: Efficiency=(10^(-1/slope)-1) *100. Quantitative PCR was performed using the comparative cycle threshold (CT) method with Power SYBR Green dye and the Vii-7™ Real-Time PCR System (Applied Biosystems) as previously described(6).

Antipsychotic-exposed monkeys

Experimentally naïve, male, young adult, long-tailed macaque monkeys (*Macaca fascicularis*) received oral doses of placebo, olanzapine or haloperidol (N=6 monkeys per group) twice daily for 17-27 months(7). The doses administered to the monkeys produced trough serum levels in the therapeutic range in the treatment of schizophrenia. Animals were euthanized in triads and the tissue was processed as previously described(1). For each monkey (N=18), 150 pyramidal cells from each of DLPFC layers deep 3 and 5 were dissected as described above. The cDNA from all subjects was loaded on GeneChip® Rhesus Macaque Genome Array (Affymetrix, Santa Clara, CA) with all samples from a given triad processed together. All studies were carried out in compliance with the National Institutes of Health Guide for the Care and Use of Laboratory Animals and were approved by the University of Pittsburgh Institutional Animal Care and Use Committee.

Data Analysis and Statistics

Analysis of potential confounding factors

We also assessed the potential influence of factors frequently comorbid with a diagnosis of schizophrenia using ANCOVA models. For these analyses, we compared expression levels of the transcripts of interest between schizophrenia subjects with or without each of the following: diagnosis of schizoaffective disorder; history of substance dependence or abuse; use of nicotine, antipsychotics, antidepressants, or benzodiazepines and/or sodium valproate at the time of death; and death by suicide. In each analysis, sex, age, tissue storage time, brain pH, PMI and RIN were used as covariates.

Analysis of antipsychotic-exposed monkeys

For the antipsychotic-exposed monkey study, ANCOVAs with ARP2/3 complex transcript levels as dependent variables, treatment group as the main effect, and triad as a blocking factor were employed. All statistical tests were conducted with α=0.05.

Table S1. Demographic, postmortem, and clinical characteristics of human subjects used in this study

Subject Group[a]		Case No.	S/R/A[b]	PMI[c]	pH	RIN	Storage time[d]	Cause of death[e]	*DSM IV* Diagnoses[f]	Primary Substance[g]	Antipsychotics ATOD	Antidepressants ATOD	BZ/VPA ATOD[h]
1•	C	592	M/B/41	22.1	6.7	9.0	203	ASCVD	N				
	S	533	M/W/40	29.1	6.8	8.4	213	Accidental Asphyxiation	US		Y	N	N
2•	C	567	F/W/46	15.0	6.7	8.9	208	Mitral valve prolapse	N				
	S	537	F/W/37	14.5	6.7	8.6	213	Suicide by hanging	SA		N	N	N
3•	C	1322	M/W/62	16.5	6.8	8.6	73	ASCVD	N				
	C	630[#]	M/W/65	21.2	7.0	9.0	198	ASCVD	N				
	S	566	M/W/63	18.3	6.8	8.0	193	ASCVD	US	AAR	Y	Y	Y
4•	C	604	M/W/39	19.3	7.1	8.6	201	Hypoplastic coronary artery	N				
	S	581	M/W/46	28.1	7.2	7.9	206	Accidental combined drug overdose	PS	ADC; OAC	Y	N	Y
5•	C	546	F/W/37	23.5	6.7	8.6	211	ASCVD	N				
	S	587	F/B/38	17.8	7.0	9.0	204	Myocardial hypertrophy	US	AAR	Y	N	Y
6•	C	551	M/W/61	16.4	6.6	8.3	210	Cardiac tamponade	N				
	S	625	M/B/49	23.5	7.3	7.6	198	ASCVD	DS	AAC	Y	Y	N
7•	C	681	M/W/51	11.6	7.2	8.9	191	Hypertrophic cardiomyopathy	N				
	S	640	M/W/49	5.2	6.9	8.4	196	Pulmonary embolism	PS		Y	Y	N
8•	C	806	M/W/57	24.0	6.9	7.8	170	Pulmonary embolism	N				
	S	665	M/B/59	28.1	6.9	9.2	194	Intestinal hemorrhage	PS	ADC	Y	Y	N
9•	C	822	M/B/28	25.3	7.0	8.5	167	ASCVD	N				
	S	787	M/B/27	19.2	6.7	8.4	173	Suicide by gun shot	SA	ODC	Y	N	N
10•	C	727	M/B/19	7.0	7.2	9.2	184	Trauma	N				
	S	829	M/W/25	5.0	6.8	9.3	165	Suicide by drug overdose	SA	ADC; OAR	N	N	Y
11•	C	871	M/W/28	16.5	7.1	8.5	156	Trauma	N				
	S	878	M/W/33	10.8	6.7	8.9	156	Myocardial fibrosis	DS	ADC	Y	Y	Y
12•	C	700	M/W/42	26.1	7.0	8.7	188	ASCVD	N				
	S	539	M/W/50	40.5	7.1	8.1	212	Suicide by combined drug overdose	SA	ADR	Y	Y	Y
13•	C	988	M/W/82	22.5	6.2	8.4	135	Trauma	N				
	S	621	M/W/83	16.0	7.3	8.7	199	Accidental asphyxiation	US		N	N	N
14•	C	686	F/W/52	22.6	7.0	8.5	190	ASCVD	N				
	S	656	F/B/47	20.1	7.3	9.2	195	Suicide by gun shot	SA	ADC	Y	N	N
15•	C	634	M/W/52	16.2	7.0	8.5	197	ASCVD	N				
	S	722	M/B/45	9.1	6.7	9.2	185	Upper GI bleeding	US	ODR; OAR	Y	N	N

Subject Group[a]		Case No.	S/R/A[b]	PMI[c]	pH	RIN	Storage time[d]	Cause of death[e]	*DSM IV* Diagnoses[f]	Primary Substance[g]	Antipsychotics ATOD	Antidepressants ATOD	BZ/VPA ATOD[h]
16•	C	852	M/W/54	8.0	6.8	9.1	159	Cardiac tamponade	N				
	S	781	M/B/52	8.0	6.7	7.7	174	Peritonitis	SA	ADR	Y	Y	N
17•	C	987	F/W/65	21.5	6.8	9.1	135	ASCVD	N				
	S	802	F/W/63	29.0	6.4	9.2	170	Right ventricular dysplasia	SA	ADC; ODR	Y	N	Y
18•	C	857	M/W/48	16.6	6.7	8.9	158	ASCVD	N				
	S	930	M/W/47	15.3	6.2	8.2	145	ASCVD	DS	ADR; OAR	Y	N	Y
19•	C	739	M/W/40	15.8	6.9	8.4	183	ASCVD	N				
	S	933	M/W/44	8.3	5.9	8.1	144	Myocarditis	DS		Y	Y	Y
20•†	C	1047	M/W/43	13.8	6.6	9.0	126	ASCVD	N				
	S	1209	M/W/35	9.1	6.5	8.7	107	Diphenhydramine overdose	SA		Y	N	N
21•†	C	1086	MW/51	24.2	6.8	8.1	120	ASCVD	N				
	S	10025	MB/52	27.1	6.7	7.8	99	ASCVD	DS	OAR	N	N	N
22•†	C	1092	F/B/40	16.6	6.8	8.0	120	Mitral valve prolapse	N				
	S	1178	F/B/37	18.9	6.1	8.4	111	Pulmonary embolism	SA		Y	N	Y
23•†	C	1336	M/W/65	18.4	6.8	8.0	85	Cardiac tamponade	N				
	S	1173	M/W/62	22.9	6.4	7.7	111	ASCVD	DS	ADR	Y	N	N
24•†	C	1122	M/W/55	15.4	6.7	7.9	116	Cardiac tamponade	N				
	S	1105	M/W/53	7.9	6.2	8.9	118	ASCVD	SA		Y	N	N
25•	C	1284	M/W/55	6.4	6.8	8.7	95	ASCVD	N				
	S	1188	M/W/58	7.7	6.2	8.4	109	ASCVD	US	AAR; OAR	Y	N	Y
26•	C	1191	M/B/59	19.4	6.2	8.4	109	ASCVD	N				
	S	1263	M/W/62	22.7	7.1	8.5	98	Asphyxiation	US	ADR	Y	Y	N
27•†	C	970	M/W/42	25.9	6.4	7.2	137	ASCVD	N				
	S	1222	M/W/32	30.8	6.4	7.5	105	Combined drug overdose	US	AAC	Y	Y	N
28•	C	1247	F/W/58	22.7	6.4	8.4	101	ASCVD	N				
	S	1240	F/B/50	22.9	6.3	7.7	101	ASCVD	US	ADR	Y	N	N
29•†	C	1324	M/W/43	22.3	7.0	7.3	87	Aortic dissection	N				
	S	10020	M/W/38	28.8	6.6	7.4	101	Salicylate overdose	PS	AAC; OAC	Y	Y	Y
30•†	C	1099	F/W/24	9.1	6.5	8.6	119	Cardiomyopathy	N				
	S	10023	F/B/25	20.1	6.7	7.4	100	Suicide by drowning	DS		Y	Y	Y
31•†	C	1307	M/B/32	4.8	6.7	7.6	90	ASCVD	N				

Subject Group[a]		Case No.	S/R/A[b]	PMI[c]	pH	RIN	Storage time[d]	Cause of death[e]	*DSM IV* Diagnoses[f] Primary Substance[g]		Antipsychotics ATOD	Antidepressants ATOD	BZ/VPA ATOD[h]
	S	10024	M/B/37	6.0	6.1	7.5	99	ASCVD	PS		N	N	N
32•†	C	1391	F/W/51	7.8	6.6	7.1	76	ASCVD	N				
	S	1189	F/W/47	14.4	6.4	8.3	109	Combined drug overdose	SA	AAR	Y	Y	Y
33•†	C	1282	F/W/39	24.5	6.8	7.5	95	ASCVD	N				
	S	1211	F/W/41	20.1	6.3	7.8	107	Sudden unexpected death	SA		Y	Y	N
34•†	C	1159	M/W/51	16.7	6.5	7.6	113	ASCVD	N				
	S	1296	M/W/48	7.8	6.5	7.3	93	Pneumonia	US		Y	Y	N
35•†	C	1326	M/W/58	16.4	6.7	8.0	87	ASCVD	N				
	S	1314	M/W/50	11.0	6.2	7.2	89	ASCVD	US		Y	Y	Y
36•†	C	902	M/W/60	23.6	6.7	7.7	152	ASCVD	N				
	S	1361	M/W/63	23.2	6.4	7.7	82	Cardiomyopathy	SA	ODC	Y	N	Y
37	C	1374	M/W/43	21.7	6.6	7.2	79	ASCVD	N				
	S	904	M/W/33	28.0	6.2	7.1	150	Pneumonia	SA		Y	N	Y
38	C	1555	M/W/17	15.1	6.9	7.9	44	Trauma	N				
	S	1649	M/B/17	21.4	6.9	8.1	29	Hanging	US		Y	Y	N
39	C	1268	M/B/49	19.9	7.1	7.9	96	ASCVD	N				
	S	1230	M/W/50	16.9	6.6	8.2	102	Doxepin overdose	US		Y	Y	N
40	C	1466	F/B/64	20.0	6.7	8.8	61	Trauma	N				
	S	1341	F/W/44	24.5	6.6	8.8	83	Trauma	SA	ODC	Y	N	Y
41	C	1518	M/W/50	20.7	6.4	7.7	50	ASCVD	N				
	S	1367	M/W/47	28.9	6.6	7.2	80	Combined drug overdose	SA	ADC; ODR	N	N	N
42	C	1386	M/W/46	21.2	6.7	8.3	75	ASCVD	N				
	S	1420	M/W/47	23.4	6.8	8.2	69	Jump	SA	AAR; ODC; OAR	Y	Y	N
43	C	1472	M/W/61	23.8	6.5	8.0	60	Pulmonary embolism	N				
	S	1453	M/W/62	11.1	6.4	8.2	63	Trauma	PS	ADR	Y	N	Y
44	C	1026	M/W/59	19.8	6.3	7.4	128	ASCVD	N				
	S	1454	M/W/59	24.1	6.1	7.6	62	Trauma	PS	AAR; ODC	Y	Y	N
45	C	694	M/W/38	20.7	7.0	7.7	189	Subarachnoid hemorrhage	N				
	S	1455	M/W/42	8.2	6.4	7.7	62	Peritonitis	PS	AAR; OAC	Y	N	Y
46	C	1350	M/W/21	24.2	6.4	7.3	82	Trauma	N				

Subject Group[a]		Case No.	S/R/A[b]	PMI[c]	pH	RIN	Storage time[d]	Cause of death[e]	*DSM IV* Diagnoses[f] Primary Substance[g]		Antipsychotics ATOD	Antidepressants ATOD	BZ/VPA ATOD[h]
	S	1474	M/W/37	39.9	6.7	7.0	60	Hanging	SA	ADR	N	N	N
47	C	1792	F/W/36	28.1	6.5	7.5	5	Pulmonary embolism	N				
	S	1506	F/W/47	14.1	6.6	7.5	55	Combined drug overdose	SA	ADC	Y	Y	N
48	C	1524	M/W/66	9.4	6.4	8.1	48	Intestinal infarction	N				
	S	1542	M/W/65	17.4	6.7	7.8	45	Combined drug overdose	PS		Y	Y	Y
49	C	1270	F/W/73	19.7	6.7	7.7	96	Trauma	N				
	S	1579	F/W/69	16.1	6.7	7.7	39	ASCVD	SA	ADR; ODC	Y	N	Y
50	C	1372	M/W/37	20.5	6.6	9.0	79	Asphyxiation	N				
	S	1581	M/W/32	18.4	6.8	9.0	39	ASCVD	PS	ODC; OAC	Y	Y	N
51	C	1543	F/W/45	17.9	6.8	7.4	45	Subarachnoid hemorrhage	N				
	S	10026	F/W/46	23.8	6.6	7.6	98	Thermal injuries	US		Y	Y	N
52	C	1583	M/W/58	19.1	6.8	8.2	39	Trauma	N				
	S	1686	M/B/56	14.1	6.2	8.3	22	ASCVD	PS	AAR	Y	Y	Y
53	C	1554	M/W/50	23.2	6.5	7.6	44	ASCVD	N				
	S	1691	M/W/51	31.9	6.6	7.7	20	Combined drug overdose	PS	ADR; ODC	Y	N	Y
54	C	1635	M/W/66	25.3	6.8	8.2	31	Cardiac tamponade	N				
	S	1706	M/B/60	28.1	6.8	8.4	17	Sepsis	SA	AAR; ODC; OAR	Y	N	N
55	C	1384	M/W/67	21.9	6.6	7.0	77	ASCVD	N				
	S	1712	M/W/63	15.1	6.2	7.1	15	ASCVD	SA	ADR; ODC	Y	Y	Y
56	C	1558	M/W/54	24.4	6.9	7.7	43	ASCVD	N				
	S	1734	M/W/54	28.6	6.1	7.7	12	Pneumonia	US	AAR; ODC; OAR	Y	N	N
57	C	516	M/B/20	14.0	6.9	8.4	215	Homicide by gun shot	N				
	S	547	M/B/27	16.5	7.0	7.4	211	Heat stroke	SA		Y	Y	Y
58	C	685	M/W/56	14.5	6.6	8.1	191	Hypoplastic coronary artery	N				
	S	622	M/W/58	18.9	6.8	7.4	198	Right MCA infarction	US		N	N	N
59	C	575	F/B/55	11.3	6.8	9.6	206	ASCVD	N				
	S	517	F/W/48	3.7	6.7	9.3	215	Intracerebral hemorrhage	DS	ADC	Y	N	N

Subject Group[a]		Case No.	S/R/A[b]	PMI[c]	pH	RIN	Storage time[d]	Cause of death[e]	*DSM IV* Diagnoses[f]	Primary Substance[g]	Antipsychotics ATOD	Antidepressants ATOD	BZ/VPA ATOD[h]
60	C	818	F/W/67	24.0	7.1	8.4	168	Anaphylactic reaction	N				
	S	917	F/W/71	23.8	6.8	7.0	148	ASCVD	US		Y	N	N
61	C	10005	M/W/42	23.5	6.7	7.4	107	Trauma	N				
	S	1256	M/W/34	27.4	6.4	7.9	99	Hanging	US		Y	N	N
62	C	10003	M/W/49	21.2	6.5	8.4	109	Trauma	N				
	S	1088	M/W/49	21.5	6.5	8.1	120	Combined drug overdose	US	ADC; OAC	Y	Y	N

● Subject pairs used for pyramidal cell microarray study. † Subject pairs used for parvalbumin cell microarray study. # Due to limited availability of fresh frozen tissue sections, comparison subjects 1322 were substituted for subject 630 in pair 3, for the qPCR studies in total tissue homogenates. a: C, normal comparison; S, schizophrenia; b: A, age in years; B, black; F, female; M, male; R, race; S, sex; W, white; c: PMI, postmortem interval (hours); d: Storage time (months) at -80C; e: ASCVD, arteriosclerotic cardiovascular disease; MCA, middle coronary artery; f: DS, disorganized schizophrenia; PS, paranoid schizophrenia; SA, schizoaffective disorder; US, undifferentiated schizophrenia; g: ADC, alcohol dependence, current at time of death; ADR, alcohol dependence, in remission at time of death; AAC, alcohol abuse, current at time of death; AAR, alcohol abuse, in remission at time of death; ODC, other substance dependence, current at time of death; ODR, other substance dependence, in remission at time of death; OAC, other substance abuse, current at time of death; OAR, other substance abuse, in remission at time of death; h: BZ/VPA ATOD; BZ, benzodiazepines; VPA, Sodium valproate; ATOD, at time of death; Y, yes; N, no.

TABLE S2. Sequences and priming efficiency for all human qPCR primer sets used in this study

Gene	Forward Primer (F) Reverse Primer (R)	Accession #	Amplicon Size (bp)	Position	Primer Efficiency %
Beta actin	(F) GATGTGGATCAGCAAGCA (R) AGAAAGGGTGTAACGCAACTA	NM_001101	101	1146-1246	100%
Cyclophilin	(F) GCAGACAAGGTCCCAAAG (R) GAAGTCACCACCCTGACAAC	NM_021130	126	159-284	98%
Glyceraldehyde-3- phosphate dehydrogenase (GAPDH)	(F) TGCACCACCAACTGCTTAGC (R) GGCATGGACTGTGGTCATG	NM_002046	87	556-642	97%
ARP2 actin-related protein 2 (ACTR2)	(F) AATTCAGGCAGCTGACATTG (R) GGCAGGCCAGGATACATAGT	NM_001005386.2	87	1085 - 1171	94%
ARP3 actin-related protein 3 (ACTR3)	(F) ATGTCATTCCTGTGGCTGAA (R) TCTCGGTCTCTCAGCAGTTG	NM_005721.4	109	873 - 981	97%
Actin related protein 2/3 complex, subunit 1A (ARPC1A)	(F) TGCAGGTCTCGACTCTGAAG (R) ACTTGGAGACGAAGGTCAGG	NM_006409.3	147	871 - 1017	94%
Actin related protein 2/3 complex, subunit 1B (ARPC1B)	(F) CCTAGACTCGCTGCACAAGA (R) AGGCTGACTCCAAGCTCTTC	NM_005720.3	137	1080 - 1216	91%
Actin related protein 2/3 complex, subunit 2 (ARPC2)	(F) AACCTCCTCTGGAGCTGAAA (R) GGATCAGGTTGATGGTGTTG	NM_152862.2	123	780 - 902	94%
Actin related protein 2/3 complex, subunit 3 (ARPC3)	(F) CCGGCTTACCACTCTTCTCT (R) CCATGTTTCCGATGAGTTTG	NM_001278556.1	55	155 - 209	97%
Actin related protein 2/3 complex, subunit 4 (ARPC4)	(F) ATGATGATGCGAGCAGAGAA (R) TGCTCTGTGTGGAAGTTGGT	NM_001024960.2	95	343 - 437	97%
Actin related protein 2/3 complex, subunit 5 (ARPC5)	(F) GCAGCATTGTCTTGAAGGTG (R) ACGGGCTCTCAAATCCTTTA	NM_005717.3	126	509 - 634	92%
Cortactin (CTTN)	(F) TGGATAAGAATGCGTCAACC (R) GGTCACAGCTTCGACAGGTA	NM_005231.3	83	1156 - 1238	95%
Wiskott-Aldrich syndrome-like (WASL)	(F) GAAGTGCAGTGGTGTTGCTT (R) CCCACAATAGTTTCCCATCC	NM_003941.3	95	514 - 608	92%
Cytoplasmic FMR1 interacting protein 1 (CYFIP1)	(F) CCATGTTTGAGGTCATCCTG (R) AGATGGGGTCATCCAGAAAG	NM_001033028.1	54	2281 - 2334	101%
WAS protein family member 1 (WASF1)	(F) GTCACCAGCTACAGGCAGAA (R) TGACAAGGCAGATGGAAGAG	NM_003931.2	82	1764 - 1845	99%

TABLE S3. Summary of differences* by transcript in pyramidal cells in DLPFC layer 3 and layer 5 and gray matter

Transcript	Pyramidal Cell				Gray Matter			
	Layer 3 (N=36 pairs)		Layer 5 (N=34 pairs)		qPCR (N=36 pairs)		qPCR (N=62 pairs)	
	% Change	P-value	% Change	P-value	% Change	P-value	% Change	P-value
ACTR2	-10.9%	0.021	-12.2%	0.048	0.2%	0.934	-0.7%	0.558
ACTR3	-15.2%	0.002	-23.7%	<0.001	-3.2%	0.081	-3.5%	0.012
ARPC1A	3.6%	0.481	2.6%	0.732	0.1%	0.940	0.3%	0.559
ARPC1B	-4.5%	0.302	-2.3%	0.562	5.0%	0.392	15.5%	0.010
ARPC2	-14.9%	<0.001	-16.9%	0.013	-1.5%	0.190	-1.6%	0.097
ARPC3	-15.9%	0.001	-16.8%	0.005	3.8%	0.034	4.3%	0.018
ARPC4	-11.2%	<0.001	-10.4%	0.014	-2.0%	0.040	-3.5%	<0.001
ARPC5	-10.2%	0.015	-14.8%	0.007	-6.0%	0.017	-7.4%	<0.001
CTTN	-16.4%	0.052	-27.3%	0.002	5.9%	0.014	7.5%	0.004
WASL	-10.1%	0.010	-17.9%	0.014	3.4%	0.009	3.5%	0.023
CYFIP1	-14.3%	0.088	-17.7%	0.006	5.9%	0.645	7.5%	0.118
WASF1	4.6%	0.076	2.5%	0.303	3.4%	0.065	3.5%	0.009

*All reported p-values are from paired ANCOVAs.

FIGURE S1.

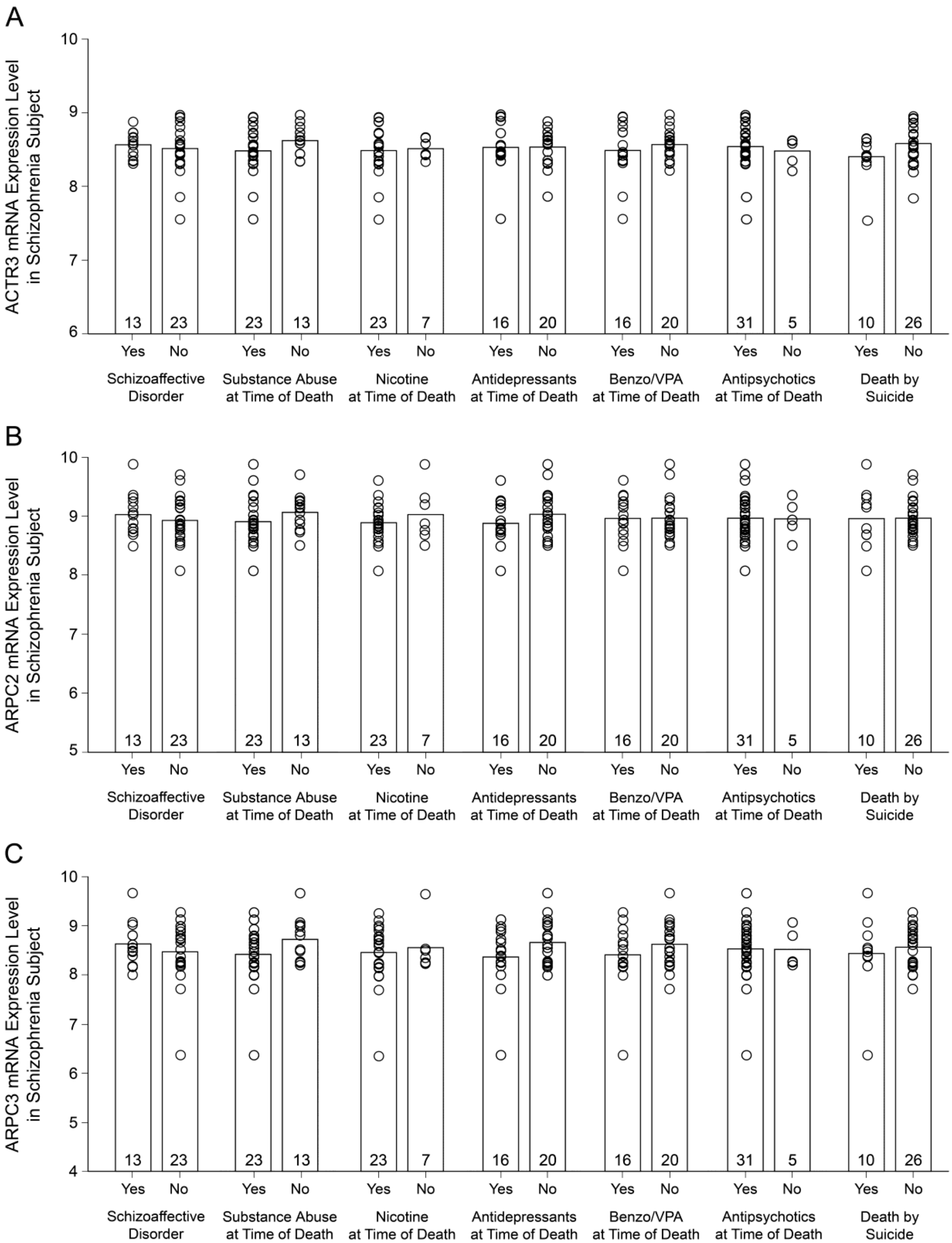
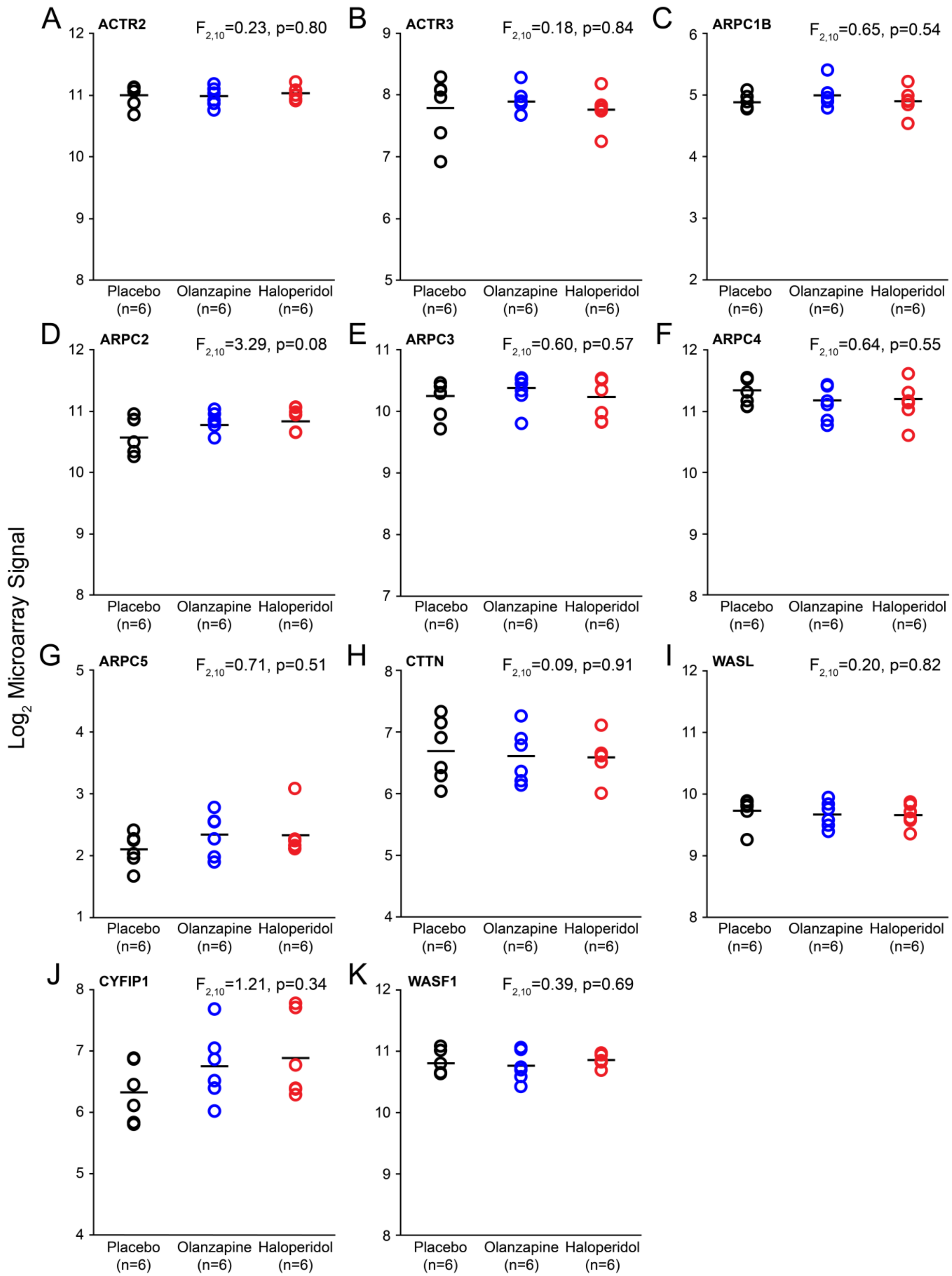

A
ACTR3 mRNA Expression Level in Schizophrenia Subject
10
9
8
7
6
13
23
23
13
23
7
16
20
16
20
31
5
10
26
Yes
No
Schizoaffective Disorder
Substance Abuse at Time of Death
Nicotine at Time of Death
Antidepressants at Time of Death
Benzo/VPA at Time of Death
Antipsychotics at Time of Death
Death by Suicide
B
ARPC2 mRNA Expression Level in Schizophrenia Subject
10
9
8
7
6
5
C
ARPC3 mRNA Expression Level in Schizophrenia Subject
10
9
8
7
6
5
4

FIGURE S2.



A ACTR2 F2,10=0.23, p=0.80
B ACTR3 F2,10=0.18, p=0.84
C ARPC1B F2,10=0.65, p=0.54
D ARPC2 F2,10=3.29, p=0.08
E ARPC3 F2,10=0.60, p=0.57
F ARPC4 F2,10=0.64, p=0.55
G ARPC5 F2,10=0.71, p=0.51
H CTTN F2,10=0.09, p=0.91
I WASL F2,10=0.20, p=0.82
J CYFIP1 F2,10=1.21, p=0.34
K WASF1 F2,10=0.39, p=0.69
Log2 Microarray Signal
Placebo (n=6)
Olanzapine (n=6)
Haloperidol (n=6)

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