

**Supplementary Table 1. Detailed Demographic Characteristics of Subjects**

	Group	Age (years)	Race	Gender	PMI (hours)	Brain pH	Cause of Death	Psychotropic Drugs (at the time of death)	Psychiatric Diagnosis
<b>Normal Control Subjects <sup>a</sup></b>									
1.	CONTROL	19	Black	Male	11	6.9	GSW	None	Normal
2.	CONTROL	22	Black	Male	19	6.9	GSW	None	Normal
3.	CONTROL	42	White	Female	23	7.2	Pneumonia	None	Normal
4.	CONTROL	37	Black	Male	5	7.1	ASCVD	None	Normal
5.	CONTROL	31	Black	Male	8	7.2	GSW	None	Normal
6.	CONTROL	46	Black	Male	9	7.1	Multiple injuries	None	Normal
7.	CONTROL	33	White	Male	15	7.0	GSW	None	Normal
8.	CONTROL	48	White	Male	26	6.9	ASCVD	None	Normal
9.	CONTROL	40	White	Female	7	7.0	ASCVD	None	Normal
10.	CONTROL	23	Black	Male	15	6.8	GSW	None	Normal
11.	CONTROL	83	White	Male	20	7.1	ASCVD	None	Normal
12.	CONTROL	65	Black	Female	23	6.9	ASCVD	None	Normal
13.	CONTROL	35	White	Male	24	6.9	Crush injury to abdomen and chest	None	Normal
14.	CONTROL	52	White	Male	30	7.3	ASCVD	None	Normal
15.	CONTROL	37	White	Male	24	7.0	ASCVD	None	Normal
16.	CONTROL	45	White	Male	22	7.3	ASCVD	None	Normal
17.	CONTROL	26	White	Male	12	6.9	Arrhythmia	None	Normal
18.	CONTROL	47	White	Male	10	7.0	ASCVD	None	Normal
19.	CONTROL	31	White	Male	16	7.2	MVA	None	Normal
20.	CONTROL	60	White	Male	15	7.1	Accidental drowning	None	Normal
21.	CONTROL	28	White	Male	13	6.8	Electrocution	None	Normal
22.	CONTROL	45	White	Female	16	6.9	Cardiac arrhythmia	None	Normal
23.	CONTROL	62	White	Male	19	7.0	Cardiac arrest	None	Normal
24.	CONTROL	53	White	Male	15	6.9	ASCVD	None	Normal
<b>Depressed Suicide Subjects <sup>b</sup></b>									
1.	SUICIDE	27	White	Male	24	7.0	GSW	None	MDD, Ethanol abuse
2.	SUICIDE	44	White	Female	11	7.2	Drug overdose	Nortriptyline	MDD, Ethanol abuse
3.	SUICIDE	36	White	Female	10	7.1	GSW	None	MDD
4.	SUICIDE	24	White	Male	7	7.1	GSW	Ethanol	MDD
5.	SUICIDE	43	White	Male	12	7.0	Drug Overdose	None	MDD, Polysubstance Abuse
6.	SUICIDE	53	White	Male	23	6.9	Jumped from height	None	MDD

7.	SUICIDE	41	White	Female	27	7.1	Drug Overdose	Amitriptyline, Desipramine, Nortriptyline, Ethanol	MDD, Ethanol abuse
8.	SUICIDE	22	Black	Female	16	7.3	Drug overdose	None	MDD
9.	SUICIDE	46	White	Female	21	6.9	Drug overdose	Amitriptyline, Desipramine, Ethanol	MDD
10.	SUICIDE	36	White	Female	18	7.2	GSW	None	MDD
11.	SUICIDE	38	White	Male	24	7.0	Drug overdose & Ethanol overdose	Ethanol	MDD, Ethanol abuse
12.	SUICIDE	46	White	Female	16	6.8	Drug overdose / Nortriptyline Intoxication	Nortriptyline	MDD, Panic disorder with agoraphobia
13.	SUICIDE	23	White	Male	12	7.0	Hanging	Paroxetine	MDD
14.	SUICIDE	18	White	Male	17	6.3	Hanging	None	MDD
15.	SUICIDE	30	White	Male	17	7.1	Hanging	Venlafaxine	MDD
16.	SUICIDE	19	White	Male	18	6.2	CO intoxication	Ethanol, CO	MDD, Ethanol abuse, Polysubstance abuse
17.	SUICIDE	44	White	Female	30	7.2	Drug overdose, Ethanol intoxication	Fluoxetine, Ethanol	MDD, Ethanol abuse, Opioid abuse
18.	SUICIDE	74	White	Female	27	7.0	Venlafaxine overdose	Venlafaxine, Ethanol	MDD, Ethanol abuse
19.	SUICIDE	25	White	Male	14	6.8	Hanging	Ethanol	MDD
20.	SUICIDE	23	Black	Male	23	6.9	Hanging	None	MDD
21.	SUICIDE	63	White	Male	19	6.9	Drug overdose, Ethanol intoxication	Ethanol	MDD
22.	SUICIDE	67	White	Male	22	7.0	GSW	Fluoxetine, Venlafaxine	MDD
23.	SUICIDE	40	White	Female	20	7.0	Drug overdose	Alprazolam	MDD
24.	SUICIDE	53	White	Male	26	7.1	Suicide by stab wound	Sertraline	MDD

ASCVD, atherosclerotic cardiovascular disease; CO, carbon monoxide; GSW, gunshot wound; MDD, major depressive disorder; MVA, motor vehicle accident

<sup>a</sup> Mean ± SD age is 42.08 ± 15.35 years; PMI is 16.54 ± 6.56 hours; brain pH is 7.02 ± 0.15; 7 Black, 17 White; 20 Males, 4 Females

<sup>b</sup> Mean ± SD age is 38.96 ± 15.40 years; PMI is 18.92 ± 6.02 hours; brain pH is 6.96 ± 0.25; 2 Black, 22 White; 14 Males, 10 Females