

Supplementary Table 1: Demographic, medical history and CNS collection data for those subjects in which cortical mRNA levels were measured.

| Controls                       | Age<br>(yr) | Sex | PMI<br>(hr) | pH   | RIN | Cause of death                      | DoI<br>(yr) | Antipsychotic Drugs           | FRADD | Anti-cholinergic | Suicide | Benzodiazepines | Blood / Urine Toxicology |         |       | NicAlert<br>Score |
|--------------------------------|-------------|-----|-------------|------|-----|-------------------------------------|-------------|-------------------------------|-------|------------------|---------|-----------------|--------------------------|---------|-------|-------------------|
|                                |             |     |             |      |     |                                     |             |                               |       |                  |         |                 | Cannabinoids             | Alcohol | Other |                   |
|                                | 71          | M   | 50          | 6.33 | 9.8 | Ischaemic heart disease             |             |                               |       | N                | N       | N               |                          |         |       |                   |
|                                | 59          | F   | 20.5        | 6.58 | 9.8 | Congestive cardiac failure          |             |                               |       | N                | N       | N               |                          |         |       |                   |
|                                | 65          | M   | 41          | 6.56 | 9.8 | Ischaemic heart disease             |             |                               |       | N                | N       | N               |                          |         |       |                   |
|                                | 73          | F   | 28          | 6.37 | 9.2 | Cancer: uterus                      |             |                               |       | N                | N       | N               |                          |         |       |                   |
| *                              | 68          | F   | 38          | 6.32 | 7.4 | Acute asthma                        |             |                               |       | N                | N       | N               |                          |         |       | 3                 |
|                                | 50          | M   | 69          | 6.43 | 8.9 | Ischaemic heart disease             |             |                               |       | N                | N       | N               |                          |         |       |                   |
|                                | 65          | M   | 20.5        | 6.47 | 8.5 | Acute myocardial infarct            |             |                               |       | N                | N       | N               |                          |         |       |                   |
| *                              | 50          | M   | 65          | 6.40 | 8.8 | Ischaemic heart disease             |             |                               |       | N                | N       | N               |                          |         |       | 3                 |
| *                              | 25          | M   | 50          | 6.48 | 7.6 | Exsanguination                      |             |                               |       | N                | N       | N               |                          |         |       | 3                 |
| *                              | 53          | M   | 44.5        | 6.56 | 9.0 | Ischaemic heart disease             |             |                               |       | N                | N       | N               |                          |         |       | 3                 |
| *                              | 22          | M   | 51          | 6.58 | 8.6 | Exsanguination                      |             |                               |       | N                | N       | N               |                          |         |       | 2                 |
|                                | 36          | F   | 60          | 6.40 | 9.9 | Dilated cardiomyopathy              |             |                               |       | N                | N       | N               |                          |         |       |                   |
|                                | 46          | M   | 46.5        | 6.08 | 9.6 | Acute myocardial infarct            |             |                               |       | N                | N       | N               |                          |         |       |                   |
|                                | 22          | M   | 62          | 6.39 | 9.5 | Iatrogenic haemorrhage              |             |                               |       | N                | N       | N               |                          |         |       |                   |
|                                | 25          | M   | 35          | 6.15 | 9.7 | Ventricular hypertrophy             |             |                               |       | N                | N       | N               |                          |         |       |                   |
|                                | 26          | M   | 46.5        | 6.37 | 9.5 | Electrocution                       |             |                               |       | N                | N       | N               |                          |         |       |                   |
| *                              | 42          | M   | 63          | 6.34 | 8.4 | Cardiomegaly                        |             |                               |       | N                | N       | N               |                          |         |       | 3                 |
| *                              | 66          | F   | 43          | 6.37 | 9.0 | Acute myocardial infarct            |             |                               |       | N                | N       | N               |                          |         |       | 0                 |
|                                | 43          | M   | 45          | 6.25 | 9.8 | Drowning                            |             |                               |       | N                | N       | N               |                          |         |       |                   |
| *                              | 26          | M   | 24          | 6.42 | 9.3 | Electrocution                       |             |                               |       | N                | N       | N               |                          |         |       | 3                 |
|                                | 48          | M   | 24          | 6.37 | 9.7 | Coronary artery atheroma            |             |                               |       | N                | N       | N               |                          |         |       |                   |
| *                              | 72          | M   | 39          | 6.21 | 8.5 | Coronary artery atheroma            |             |                               |       | N                | N       | N               |                          |         |       | 0                 |
|                                | 48          | M   | 56          | 6.38 | 8.9 | Ischaemic heart disease             |             |                               |       | N                | N       | N               |                          |         |       |                   |
| *                              | 68          | M   | 41          | 6.06 | 9.3 | Aortic stenosis                     |             |                               |       | N                | N       | N               |                          |         |       | 0                 |
| *                              | 68          | M   | 69          | 6.59 | 8.6 | Coronary artery atheroma            |             |                               |       | N                | N       | N               |                          |         |       | 3                 |
| *                              | 52          | M   | 22          | 5.98 | 8.6 | Pulmonary embolus                   |             |                               |       | N                | N       | N               |                          |         |       | 1                 |
| *                              | 43          | M   | 51          | 6.43 | 9.1 | Coronary artery atheroma            |             |                               |       | N                | N       | N               |                          |         |       | 3                 |
|                                | 53          | M   | 12          | 6.34 | 7.0 | Pulmonary thromboembolism           |             |                               |       | N                | N       | N               |                          |         |       |                   |
| *                              | 39          | F   | 65          | 6.38 | 7.5 | Mitral valve prolapse               |             |                               |       | N                | N       | N               |                          |         |       | 1                 |
| *                              | 42          | M   | 26          | 6.32 | 8.3 | Coronary artery atheroma            |             |                               |       | N                | N       | N               |                          |         |       | 1                 |
| <b>Schizophrenia: MRDS</b>     |             |     |             |      |     |                                     |             |                               |       |                  |         |                 |                          |         |       |                   |
| *                              | 51          | M   | 20          | 5.98 | 9.5 | Ischaemic heart disease             | 32          | Fluphenazine, Thioridazine    | 2000  | N                | N       | Y               |                          |         |       | 3                 |
| *                              | 25          | M   | 49          | 6.38 | 9.3 | Overdose                            | 2           | Trifluoperazine               | 200   | N                | Y       | N               | Y                        |         |       | 2                 |
| *                              | 53          | M   | 37          | 5.98 | 9.5 | Intestinal ischaemia                | 30          | Fluphenazine, chlorpromazine  | 1700  | Y                | N       | N               |                          | Y       |       | 2                 |
| *                              | 67          | M   | 21          | 6.46 | 9.1 | Pneumonia                           | 36          | Fluphenazine                  | 75    | Y                | N       | N               |                          |         |       | 1                 |
| *                              | 44          | M   | 32          | 6.28 | 9.1 | Ischaemic heart disease             | 23          | Thioridazine                  | 600   | N                | N       | N               |                          |         | Y     | 3                 |
| *                              | 71          | M   | 48          | 6.45 | 8.6 | Aspiration: food                    | 53          | Thioridazine                  | 150   | Y                | N       | Y               |                          | Y       |       | 1                 |
| *                              | 53          | M   | 43          | 6.23 | 9.3 | Aspiration: food                    | 7           | Chlorpromazine                | 200   | N                | N       | N               |                          |         |       | 3                 |
| *                              | 69          | M   | 44.5        | 6.38 | 8.2 | Ischaemic heart disease             | 47          | Trifluoperazine               | 100   | Y                | N       | N               |                          |         |       | 3                 |
| *                              | 22          | M   | 37          | 6.17 | 9.6 | Overdose                            | 3           | Pimozide                      | 200   | N                | Y       | N               | Y                        |         |       | 3                 |
| *                              | 65          | F   | 50          | 6.35 | 8.3 | Ruptured abdominal aneurysm         | 18          | Fluphenazine, haloperidol     | 550   | Y                | N       | Y               |                          | Y       |       | 0                 |
| *                              | 41          | M   | 31          | 6.20 | 8.6 | Overdose                            | 11          | Fluphenazine, trifluoperazine | 500   | N                | Y       | Y               | Y                        | Y       |       | 3                 |
| *                              | 42          | M   | 47          | 6.26 | 7.5 | Coronary artery atheroma            | 22          | Fluphenazine                  | 1000  | Y                | N       | N               |                          |         |       | 3                 |
| *                              | 26          | M   | 52          | 6.39 | 7.7 | Carbon monoxide poisoning           | 2           | Haloperidol                   | 500   | Y                | Y       | Y               | Y                        | Y       |       | 3                 |
| *                              | 47          | F   | 50          | 6.31 | 8.8 | Pneumonia                           | 20          | Risperidone                   | 600   | N                | N       | Y               |                          |         |       | 1                 |
| *                              | 48          | M   | 30          | 6.62 | 8.9 | Bronchopneumonia                    | 24          | Flupenthixol, thioridazine    | 1250  | N                | N       | Y               |                          |         |       | 0                 |
| <b>Schizophrenia: non-MRDS</b> |             |     |             |      |     |                                     |             |                               |       |                  |         |                 |                          |         |       |                   |
| *                              | 71          | F   | 36          | 5.84 | 8.2 | Chronic obstructive airways disease | 48          | Off drug                      |       | N                | N       | N               |                          |         |       | 0                 |
| *                              | 66          | M   | 39.5        | 6.49 | 8.8 | Bronchopneumonia                    | 45          | Chlorpromazine, Haloperidol   | 1200  | N                | N       | Y               |                          |         |       | 0                 |
| *                              | 47          | M   | 32.5        | 6.41 | 9.1 | Ischaemic heart disease             | 27          | Fluphenazine, Thioridazine    | 530   | N                | N       | N               |                          |         |       | 3                 |
| *                              | 27          | M   | 22          | 6.28 | 8.6 | Burning                             | 8           | Chlorpromazine, Pimozide      | 1200  | N                | Y       | Y               |                          |         |       | 3                 |
| *                              | 72          | F   | 58.5        | 6.48 | 8.8 | Aspiration: Pneumonia               | 37          | Chlorpromazine                | 25    | N                | N       | N               |                          |         |       | 1                 |
| *                              | 47          | M   | 41.5        | 6.52 | 9.4 | Multiple injuries                   | 21          | Chlorpromazine, haloperidol   | 1400  | N                | Y       | Y               |                          |         |       | 3                 |
| *                              | 22          | M   | 37          | 6.07 | 9.0 | Pericarditis                        | 3           | Trifluoperazine, flupenthixol | 450   | N                | N       | N               | Y                        | Y       |       | 3                 |

|   |    |   |      |      |     |                            |    |                              |     |   |   |   |   |   |   |   |
|---|----|---|------|------|-----|----------------------------|----|------------------------------|-----|---|---|---|---|---|---|---|
| * | 38 | M | 50   | 6.02 | 8.8 | Meningoencephalitis        | 4  | Clozapine                    | 100 | Y | N | N | Y | Y | Y | 3 |
| * | 35 | F | 15   | 6.26 | 9.0 | Coronary artery thrombosis | 7  | Haloperidol                  | 300 | Y | N | N | Y |   |   | 2 |
| * | 55 | M | 25   | 6.10 | 9.3 | Coronary artery atheroma   | 33 | Thioridazine                 | 400 | Y | N | Y |   | Y |   | 1 |
| * | 48 | F | 52.5 | 6.21 | 8.8 | Pulmonary thromboembolism  | 22 | Fluphenazine, chlorpromazine | 700 | N | N | N |   |   |   | 3 |
| * | 65 | M | 42   | 6.29 | 8.5 | Bronchopneumonia           | 36 | Trifluoperazine, haloperidol | 460 | Y | N | N |   | Y |   | 3 |
| * | 42 | M | 47   | 6.44 | 8.4 | Hanging                    | 8  | Haloperidol                  | 128 | Y | Y | Y | Y | Y |   | 3 |
| * | 23 | M | 78   | 6.19 | 9.6 | Multiple injuries          | 5  | Haloperidol                  | 300 | Y | Y | N | Y | Y | Y | 1 |
| * | 70 | M | 46   | 6.80 | 8.4 | Bronchopneumonia           | 20 | Off Drug                     |     | N | N | N |   | Y |   |   |

Abbreviations: DoI = duration of illness; FRADD = final recorded antipsychotic drug dose in mg chlorpromazine equivalents / day; PMI = post-mortem interv. \* these subjects were used for the microarray study

Notes: Anticholinergic Drugs and Benzodiazepines are listed as whether or not they have been prescribed. Cannabinoids, alcohol and other non-prescribed drugs are listed when detected in blood or urine after autopsy.

NicAlert Score relative to cotinine concentrations (mg / ml): 0 = 0-10, 1 = 10-30, 2 = 30-100, 3 = 100-200, 4 = 200-500, 5 = 500-1000, 6 > 1000. Scores > 3 indicative of use of tobacco.

A positive NicAlert score (> 3) is indicative of exposure to nicotine 48 hrs before sample collection.