

Supplemental Table 1 Demographic, disease and tissue handling details for brain tissue donors

| Donor Number | Sex | Age at Death (years) | Time from death to organ harvesting (hours) | Cause of death            | Disease Duration (years) | MS diagnosis          |
|--------------|-----|----------------------|---|---------------------------|--------------------------|-----------------------|
| B1           | F   | 42                   | 31  | Multiple sclerosis        | 20                       | Secondary progressive |
| B2           | F   | 59                   | 21  | Bronchopneumonia          | 39                       | Secondary progressive |
| B3           | M   | 66                   | 16  | Gastrointestinal bleeding | 29                       | Primary progressive   |
| B4           | F   | 64                   | 7   | Gastrointestinal bleed    | 36                       | Secondary progressive |
| B5           | F   | 49                   | 31  | Chronic renal failure     | 18                       | Secondary progressive |
| B6           | M   | 54                   | 13  | Bronchopneumonia          | 17                       | Primary progressive   |
| B7           | F   | 54                   | 22  | Bronchopneumonia          | 20                       | Secondary progressive |
| B8           | F   | 39                   | 18  | Bronchopneumonia          | 21                       | Secondary progressive |
| B9           | M   | 38                   | 19  | Aspiration pneumonia      | 16                       | Progressive relapsing |
| B10          | M   | 40                   | 10  | Respiratory failure       | 12                       | Secondary progressive |
| B11          | F   | 44                   | 20  | Sepsis                    | 19                       | Secondary progressive |
| B12          | M   | 46                   | 7   | Bronchopneumonia          | 8                        | Secondary progressive |
| B13          | F   | 53                   | 17  | Multiple sclerosis        | 28                       | Secondary progressive |
| B14          | M   | 88                   | 22  | Prostate cancer.          | N/A                      | Control patient       |
| B15          | M   | 84                   | 5   | Bronchopneumonia          | N/A                      | Control patient       |
| B16          | F   | 84                   | 13  | Cerebrovascular disease   | N/A                      | Control patient       |
| B17          | M   | 73                   | 21  | Cardiogenic shock         | N/A                      | Control patient       |
| B18          | M   | 77                   | 26  | Lung cancer               | N/A                      | Control patient       |
| B19          | M   | 64                   | 18  | Cardiac failure           | N/A                      | Control patient       |
| B20          | M   | 82                   | 21  | Undetermined              | N/A                      | Control patient       |
| B21          | M   | 92                   | 13  | Cardiac failure           | N/A                      | Control patient       |
| B22          | F   | 90                   | 15  | Old age                   | N/A                      | Control patient       |
| B23          | F   | 84                   | 24  | Cardiac failure           | N/A                      | Control patient       |
| B24          | F   | 69                   | 33  | Lung cancer               | N/A                      | Control patient       |
| B25          | M   | 35                   | 22  | Carcinoma of the tongue   | N/A                      | Control patient       |
| B26          | F   | 78                   | 33  | Leukaemia                 | N/A                      | Control patient       |
| B27          | F   | 60                   | 13  | Ovarian cancer            | N/A                      | Control patient       |
| B28          | M   | 75                   | 17  | Aspiration pneumonia      | N/A                      | Control patient       |
| B29          | F   | 88                   | 20  | Pneumonia                 | N/A                      | Control patient       |
| B30          | M   | 68                   | 30  | Cardiac failure           | N/A                      | Control patient       |
| B31          | M   | 82                   | 21  | Myelodysplasia            | N/A                      | Control patient       |
| B32          | M   | 54                   | 20  | Lung cancer               | N/A                      | Control patient       |
| B33          | F   | 87                   | 12  | Breast cancer             | N/A                      | Control patient       |

Supplemental Table 2 Demographic details for platelet donors

| Donor number | Sex | Age (years) |
|--------------|-----|-------------|
| P1           | M   | 25          |
| P2           | F   | 29          |
| P3           | M   | 55          |
| P4           | M   | 61          |
| P5           | M   | 45          |
| P6           | M   | 24          |
| P7           | F   | 37          |
| P8           | M   | 31          |
| P9           | M   | 25          |
| P10          | M   | 28          |
| P11          | M   | 37          |
| P12          | F   | 28          |
| P13          | M   | 25          |