

Table S5. Case and Control Sample Description. A) Sources and numbers of cases and controls. B) Average ages of cases and controls. All values are given in years +/- standard deviation. C) Distribution of living and deceased cases. Mean and Median Survival are based on deceased cases only. D) Distributions of the site of onset in sporadic ALS.

A)

| | Cases | | | Controls | | | Overall |
|----------------------|-------------|-------------|------------|-------------|-------------|-------------|-------------|
| | Total | Males | Females | Total | Males | Females | Total |
| USA | | | | | | | |
| Boston | 572 | 363 | 209 | 789 | 480 | 309 | 1361 |
| Atlanta | 158 | 106 | 52 | 0 | 0 | 0 | 158 |
| NINDS | 187 | 117 | 70 | 123 | 2 | 121 | 310 |
| Subtotal | 917 | 586 | 331 | 912 | 482 | 430 | 1829 |
| Europe | | | | | | | |
| London | 238 | 145 | 93 | 212 | 132 | 80 | 450 |
| France | 229 | 107 | 122 | 709 | 708 | 1 | 938 |
| Netherlands | 437 | 252 | 185 | 425 | 251 | 174 | 862 |
| Subtotal | 904 | 504 | 400 | 1346 | 1091 | 255 | 2250 |
| GWAS Total | 1821 | 1090 | 731 | 2258 | 1573 | 685 | 4079 |
| Stage 2 Total | 538 | 284 | 254 | 556 | 143 | 413 | 1094 |
| Total Samples | 2359 | 1374 | 985 | 2814 | 1716 | 1098 | 5173 |

B)

| | Cases | | | Controls | | |
|-------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | Total | Males | Females | Total | Males | Females |
| USA | | | | | | |
| Boston | 54.0 +/- 12.9 | 52.3 +/- 13.1 | 56.9 +/- 11.9 | 59.5 +/- 14.1 | 62.4 +/- 13.5 | 55.1 +/- 14.0 |
| Atlanta | 52.1 +/- 14.0 | 50.7 +/- 13.0 | 54.9 +/- 15.6 | - | - | - |
| NINDS | 55.4 +/- 12.0 | 54.6 +/- 11.3 | 56.6 +/- 13.0 | 69.2 +/- 8.7 | 67.5 +/- 0.7 | 69.2 +/- 8.7 |
| Sub. Avg. | 53.8 +/- 13.0 | 52.5 +/- 12.5 | 56.1 +/- 13.5 | 64.4 +/- 11.4 | 65.0 +/- 7.1 | 62.2 +/- 11.4 |
| Europe | | | | | | |
| London | 56.8 +/- 12.5 | 54.8 +/- 12.3 | 59.8 +/- 12.4 | 55.6 +/- 12.2 | 54.9 +/- 12.1 | 56.6 +/- 12.4 |
| France | 63.4 +/- 11.9 | 61.9 +/- 12.5 | 64.7 +/- 11.2 | N.A. | N.A. | N.A. |
| Netherlands | 60.4 +/- 11.1 | 59.2 +/- 11.1 | 62.2 +/- 11.0 | 60.4 +/- 10.7 | 60.2 +/- 11.0 | 60.7 +/- 10.3 |
| Sub. Avg. | 60.2 +/- 11.8 | 58.6 +/- 11.9 | 62.2 +/- 11.5 | 58.0 +/- 11.5 | 57.6 +/- 11.6 | 58.7 +/- 11.4 |
| GWAS Total | 57.0 +/- 12.4 | 55.6 +/- 12.2 | 59.2 +/- 12.5 | 61.2 +/- 11.5 | 61.3 +/- 9.35 | 60.5 +/- 11.4 |
| Stage 2 | 58.9 +/- 11.9 | 57.5 +/- 12.0 | 60.5 +/- 11.6 | 53.1 +/- 16.3 | 54.4 +/- 14.8 | 52.7 +/- 16.8 |

C)

| USA | Samples with Duration Info | Deceased | % Alive | Mean | Median Survival (yrs.) |
|-----------------|----------------------------|----------|---------|-----------------|------------------------|
| | | | | Survival (yrs.) | |
| Boston | 529 | 398 | 24.76% | 3.76 | 3.17 |
| Atlanta | 146 | 90 | 38.36% | 3.61 | 3.05 |
| Subtotal | 675 | 488 | 27.70% | 3.74 | 3.16 |

Europe

| | | | | | |
|-----------------|-----|-----|--------|------|------|
| London | 211 | 210 | 0.47% | 3.59 | 2.89 |
| Netherlands | 435 | 316 | 27.36% | 2.60 | 2.34 |
| Subtotal | 646 | 526 | 18.58% | 3.00 | 2.48 |

| | | | | | |
|--------------|------|------|--------|------|------|
| Total | 1321 | 1014 | 23.24% | 3.35 | 2.79 |
|--------------|------|------|--------|------|------|

D)

| USA | Bulbar | | | Spinal | | | Multiples/Other | | | Grand Total |
|-----------------|--------------|--------|------|--------------|--------|------|-----------------|--------|------|-------------|
| | Total | Female | Male | Total | Female | Male | Total | Female | Male | |
| Boston | 137 (24.1%) | 62 | 75 | 391 (68.4%) | 133 | 258 | 44 (7.7%) | 14 | 30 | 572 |
| Atlanta | 36 (22.8%) | 14 | 22 | 122 (77.2%) | 38 | 84 | 0 | 0 | 0 | 158 |
| NINDS | 45 (24.1%) | 17 | 28 | 138 (73.8%) | 52 | 86 | 4 (2.2%) | 1 | 3 | 187 |
| Subtotal | 218 (23.8%) | 93 | 125 | 651 (71.0%) | 223 | 428 | 48 (5.2%) | 15 | 33 | 917 |

Europe

| | | | | | | | | | | |
|-----------------|--------------|-----|-----|--------------|-----|-----|---|---|---|-----|
| London | 72 (30.3%) | 32 | 40 | 166 (69.8%) | 61 | 105 | 0 | 0 | 0 | 238 |
| France | 102 (44.5%) | 56 | 46 | 127 (55.5%) | 66 | 61 | 0 | 0 | 0 | 229 |
| Netherlands | 136 (31.1%) | 76 | 60 | 301 (68.9%) | 109 | 192 | 0 | 0 | 0 | 437 |
| Subtotal | 310 (34.3%) | 164 | 146 | 594 (65.7%) | 236 | 358 | 0 | 0 | 0 | 904 |

Stage 2

| | | | | | | | | | |
|-------------|----|----|-------------|-----|-----|----------|---|---|-----|
| 138 (25.7%) | 83 | 55 | 395 (73.4%) | 171 | 224 | 5 (0.9%) | 0 | 5 | 538 |
|-------------|----|----|-------------|-----|-----|----------|---|---|-----|

Total

| | | | | | | | | | |
|-------------|-----|-----|--------------|-----|------|-----------|----|----|------|
| 666 (28.2%) | 340 | 326 | 1640 (69.5%) | 630 | 1010 | 53 (2.2%) | 15 | 38 | 2359 |
|-------------|-----|-----|--------------|-----|------|-----------|----|----|------|