**Title:** **TDP-43 specific autoantibody decline in Amyotrophic Lateral Sclerosis patients**

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**Supplementary table e-1**

Demographic and clinical data for individual ALS patients

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Sex** | **Age at onset** | **Age at sample** | **Age at death** | **ALS-FRS-R**  **score** | **Comorbidity** |
| 1 | F | 53 | 54 | 56 | 42 | Asthma |
| 2 | M | 80 | 81 | 81 | n/a | Hypertension |
| 3 | M | 64 | 65 | - | 43 | None |
| 4 | F | 79 | 79 | 79 | n/a | None |
| 5 | F | 72 | 73 | 73 | n/a | Ischemic Stroke, Supraventricular Tachycardia |
| 6 | F | 60 | 64 | 64 | 31 | Asthma, COPD |
| 7 | F | 72 | 72 | 72 | n/a | Previously C. Coli |
| 8 | M | 62 | 64 | 64 | 29 | Ischemic Stroke, Postinfarct Epilepsy |
| 9 | F | 69 | 69 | 70 | 37 | None |
| 10 | F | 59 | 60 | 61 | 33 | None |
| 11 | F | 67 | 69 | 69 | n/a | None |
| 12 | F | 64 | 65 | 65 | 30 | None |
| 13 | M | 56 | 60 | 61 | 26 | None |
| 14 | F | 53 | 55 | 57 | 42 | Rheumatoid Arthritis |
| 15 | M | 58 | 58 | 59 | 46 | None |
| 16 | F | 69 | 72 | - | 44 | None |
| 17 | M | 33 | 34 | n/a | 43 | None |
| 18 | F | 68 | 69 | 71 | 45 | None |
| 19 | F | 71 | 73 | - | 42 | None |
| 20 | M | 74 | 75 | 78 | 43 | None |
| 21 | F | 56 | 57 | 58 | 42 | COPD |
| 22 | M | 49 | 50 | 52 | 40 | None |
| 23 | M | 57 | 60 | 63 | 27 | None |
| 24 | F | 71 | 71 | 73 | 36 | Hypertension |
| 25 | M | 34 | 35 | 38 | 47 | None |
| 26 | F | 61 | 61 | 62 | 34 | Hypercholesterolemia, Hypothyroidism |
| 27 | M | 68 | 69 | 70 | n/a | Idiopathic Liver Disease |
| 28 | M | 45 | 46 | 47 | 22 | None |
| 29 | F | 64 | 65 | 67 | n/a | None |
| 30 | M | 76 | 77 | 78 | 41 | None |

F-female, M-male, n/a-not available, COPD-chronic obstructive pulmonary disease

**Supplementary figure e-1**

**Western Blot analyses of the integrity of TDP-43 protein.** Samples were prepared for electrophoresis by diluting 2 μg of TDP-43 protein stock in a series of 2-fold dilutions with a 4× NuPAGE sample buffer. The samples were electrophoresed on NuPAGE 4–12% Bis‐Tris gels (ThermoFisher, # NP0336) with NuPAGE 2‐(N‐morpholino) ethanesulfonic acid‐sodium dodecyl sulfate running buffer (ThermoFisher, # NP0001) and Chameleon duo Li-Cor protein standard (LI-COR Biosciences, #928-60000). After electrophoresis, gels were blotted onto Odyssey® nitrocellulose membranes 0.22 μm (LI‐COR Biosciences, # 926-31092) using the semi‐dry, BioRad apparatus (Bio‐Rad Laboratories, USA) for 60 min, using a 200 mA/membrane constant current in NuPAGE® transfer buffer (Life Technologies, # NP0006) containing 20% methanol and then blocked in Odyssey blocking buffer (PBS) (LI‐COR Biosciences, # 927-40000) for 1 h at 21°C. Blots were then incubated overnight at 4°C with anti-human TDP-43 mouse antibody (Abcam, # ab57105) in Odyssey blocking buffer with 0.1% Tween‐20. Membranes were then washed 3 × 15 min in PBS with 0.1% Tween‐20 and incubated in secondary antibody IRDye® 680LT Goat anti‐Mouse IgG1‐Specific (LI‐COR Biosciences, # 926-68050) 1:20,000 in PBS + 0.1% Tween + 0.01% sodium dodecyl sulfate at RT in dark. Subsequently, the membranes were washed 3 × 15 min in PBS, rinsed in MilliQ water, air dried, and developed on LI‐COR Bioscience Odyssey 9120 Infrared Imaging System. (LI-COR Biosciences, US). Scanned western blots were analyzed with Image Studio Lite software.v.5.2 (LI‐COR Biosciences, US).

