

# Low T-cell reactivity to TDP-43 peptides in ALS

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## Supplementary Tables

	Control	ALS
Number	25	24
Age	61.67 ± 11.83	60.37 ± 11.77
Gender (f/m)	12/13	5/19
Disease duration from onset (months)	NA	26.87 ± 22.56
Disease duration from diagnosis (months)	NA	18.27 ± 18.96
ALSFRS-R	NA	33.26 ± 9.54
sALS/ fALS	NA	20/4
Riluzole (y/n)	NA	20/4

**Suppl. Table 1.** Cohort characteristics (related to Fig. 1). Age, disease duration and ALSFRS-R: mean ± standard deviation. ALSFRS-R: Revised Amyotrophic Lateral Sclerosis Functional Rating Scale. sALS/fALS: Sporadic ALS/familial ALS.

	Control	ALS
<b>Number</b>	9	9
<b>Age</b>	55.56 ± 11.52	57.97 ± 9.93
<b>Gender (f/m)</b>	3/6	1/8
<b>Disease duration from onset (months)</b>	NA	21.11 ± 20.29
<b>Disease duration from diagnosis (months)</b>	NA	15.33 ± 19.59
<b>ALSFRS-R</b>	NA	31.22 ± 11.96
<b>sALS/ fALS</b>	NA	9/0
<b>Riluzole (y/n)</b>	NA	9/0

**Suppl. Table 2.** Cohort characteristics (related to Fig. 2). Age, disease duration and ALSFRS-R: mean ± standard deviation. ALSFRS-R: Revised Amyotrophic Lateral Sclerosis Functional Rating Scale. sALS/fALS: Sporadic ALS/familial ALS.

<b>Sequence</b>	<b>Peptide Length</b>	<b>MHC type</b>	<b>Starting position</b>	<b>Ending position</b>
<b>AQFPGACGLRY</b>	11	I	33	43
<b>GWGNLVYVVNYPKDN</b>	15	II	67	89
<b>ASSAVKVKR</b>	9	I	90	98
<b>TSDLIVLGLPWKTTE</b>	15	II	103	117
<b>STFGEVLMV</b>	9	I	125	133
<b>KVMSQRHMI</b>	9	I	160	168
<b>ELREFFSQY</b>	9	I	206	214
<b>VTFADDQIAQSLCGE</b>	15	II	232	246
<b>GMNFGAFSINPAMMA</b>	15	II	310	324
<b>NGGFGSSMDSKSSGW</b>	15	II	398	412

**Suppl. Table 3.** TDP-43 peptides for the stimulation of T cells.

	Control	ALS
<b>Number</b>	32	33
<b>Age</b>	63.78 ± 11.82	62.12 ± 9.83
<b>Gender (f/m)</b>	13/19	8/25
<b>Disease duration from onset (months)</b>	NA	48.96 ± 37.5
<b>Disease duration from diagnosis (months)</b>	NA	31.6 ± 30.4
<b>ALSFRS-R</b>	NA	32.25 ± 10.9
<b>sALS/fALS</b>	NA	32/1
<b>Riluzole (y/n)</b>	NA	29/4

**Suppl. Table 4.** Cohort characteristics (related to Fig. 3). Age, disease duration and ALSFRS-R: mean ± standard deviation. ALSFRS-R: Revised Amyotrophic Lateral Sclerosis Functional Rating Scale. sALS/fALS: Sporadic ALS/familial ALS.

		HC, Mean±SD	ALS, Mean±SD	HC, Median(IQR)	ALS, Median(IQR)	p- value	signif.
<b>IL-5</b>	<b>PHA</b>	290±213	266±257	266(112-420)	128(71-472)	0.45	ns
	<b>Actin</b>	19±30	18±50	4(1-20)	3(1-11)	0.32	ns
	<b>MOG</b>	12±25	26/65	1(0-8)	3(0-10)	0.79	ns
	<b>TDP-43</b>	13±20	6±10	3(1-20)	2(0-7)	0.03	*
<b>IFN-γ</b>	<b>PHA</b>	223±235	153±226	168(13-355)	61(18-159)	0.21	ns
	<b>Actin</b>	15±44	4±10	1(0-4)	1(0-4)	0.87	ns
	<b>MOG</b>	5±11	9±35	0(0-2)	0(0-3)	0.86	ns
	<b>TDP-43</b>	9±24	3±6	1(0-5)	1(0-3)	0.38	ns

**Suppl. Table 5. Summary statistics of ELISPOT results.** SD: standards deviation (of the sample); IQR: interquartile range; 'ns': not significant. All differences tested with Mann-Whitney U-test.

Peptide	HC, Mean±SD	ALS, Mean±SD	HC, Median (IQR)	ALS, Median (IQR)	p- value	Sign.
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<b>33-43</b>	18±30	6±9	4(1-14 )	1(0-8 )	0.35	ns
<b>67-89</b>	9±17	2±4	2(1-13 )	1(0-3 )	>0.99	ns
<b>90-98</b>	17±28	6±14	3(1-16 )	1(0-6 )	0.81	ns
<b>103-117</b>	6±10	3±5	1(0-5 )	1(0-5 )	>0.99	ns
<b>125-133</b>	4±8	3±6	1(0-5 )	1(0-4 )	>0.99	ns
<b>160-168</b>	17±31	6±16	5(0-18 )	1(0-5 )	0.78	ns
<b>206-214</b>	8±21	3±6	1(0-7 )	1(0-3 )	>0.99	ns
<b>232-246</b>	21±55	9±19	2(0-15 )	1(0-9 )	0.41	ns
<b>310-324</b>	24±58	8±14	2(0-16 )	2(0-7 )	0.06	ns
<b>398-412</b>	8±12	11±16	2(0-9 )	2(1-13 )	>0.99	ns

**Suppl. Table 6. Summary statistics of ELISPOT IL-5 results for stimulation with single TDP-43 peptides.** SD: standards deviation (of the sample); IQR: interquartile range; ‘*ns*’: not significant. All differences tested with one-way ANOVA with multiple comparisons with Bonferroni’s correction.

<b>IFNg</b>						
<b>Peptide</b>	<b>HC, Mean±SD</b>	<b>ALS, Mean±SD</b>	<b>HC, Median (IQR)</b>	<b>ALS, Median (IQR)</b>	<b>p-value</b>	<b>Sign.</b>
<b>33-43</b>	9±24	3±8	1(0-4 )	1(0-2 )	>0.99	ns
<b>67-89</b>	4±9	1±4	1(0-3 )	0(0-1 )	>0.99	ns
<b>90-98</b>	10±29	3±6	1(0-3 )	1(0-2 )	>0.99	ns
<b>103-117</b>	2±5	2±3	0(0-1 )	0(0-2 )	>0.99	ns
<b>125-133</b>	1±2	1±2	0(0-2 )	0(0-1 )	>0.99	ns
<b>160-168</b>	9±34	2±4	1(0-2 )	0(0-2 )	>0.99	ns

<b>206-214</b>	7±21	7±29	0(0-4 )	1(0-3 )	>0.99	ns
<b>232-246</b>	22±69	5±11	1(0-7 )	1(0-4 )	0.08	ns
<b>310-324</b>	24±64	5±10	1(0-9 )	1(0-4 )	0.03	*
<b>398-412</b>	6±21	3±5	1(0-3 )	1(0-3 )	>0.99	ns

**Suppl. Table 7. Summary statistics of ELISPOT IFN- $\gamma$  results for stimulation with single TDP-43 peptides.** SD: standards deviation (of the sample); IQR: interquartile range; 'ns': not significant,  $*p<0.05$ . All differences tested with one-way ANOVA with multiple comparisons with Bonferroni's correction.