SUPPLEMENTAL MATERIAL

-eTABLE 1: MEAN (+S.D.) DEMOGRAPHICS AND MEDIAN (INTERQUARTILE RANGE) CEREBROSPINAL FLUID VALUES OF ANALYTES IN RANDOMLY SELECTED TRAINING AND VALIDATION COHORTS.

-eTABLE 2: ANATOMIC DISTRIBUTION OF REDUCED FRACTIONAL ANISOTROPY IN AMYOTROPHIC LATERAL SCLEROSIS AND 4R-TAU, AND REGRESSION ANALYSES RELATING ADJUSTED PTAU:TTAU TO FRACTIONAL ANISOTROPY

eTABLE 1

MEAN (+S.D.) DEMOGRAPHICS AND MEDIAN (INTERQUARTILE RANGE) CEREBROSPINAL FLUID VALUES OF ANALYTES IN RANDOMLY SELECTED TRAINING AND VALIDATION COHORTS

	TRAINING COHORT		VALIDATION COHORT	
	SENIORS (n=13)	ALS (n=32)	SENIORS (n=12)	ALS (n=33)
Age (years)	61.54 (6.19)	54.03 (9.50)	58.83 (5.75)	58.24 (12.03)
Education (years)	16.15 (3.87)	14.93 (2.74)	15.58 (4.54)	14.61 (4.06)
Gender (M/F)	6 / 7	21 / 11	7 / 5	19 / 14
Disease Duration (months)	--	16.36 (15.58)	--	11.23 (6.71)
Ptau (pg/mL)	19.0 (11.0-26.5)	10 (7.3-12.8)*	18.5 (13.5-25.5)	12 (8.0-16.0)*
Ttau (pg/mL)	44.0 (37.1-56.9)	35.5 (24.3-56.5)	38.2 (30.5-70.7)	47.0 (33.5-71.5)
Abeta (pg/mL)	271.0 (243.1-371.0)	249.5 (214.0-283.5)	244.2 (222.0-284.5)	263.0 (180.5-288.5)
Ptau:Ttau	0.37 (0.3-0.6)	0.17 (0.1-0.3)**	0.45 (0.3-0.6)	0.18 (0.1-0.3)**
Ptau:Abeta	0.05 (0.0-0.1)	0.04 (0.0-0.1)^	0.08 (0.0-0.1)	0.04 (0.0-0.1)
Ttau:Abeta	0.13 (0.1-0.2)	0.17 (0.1-0.2)	0.15 (0.1-0.2)	0.19 (0.1-0.3)

NOTE

Indicates differing significantly from healthy seniors in the corresponding cohort at *p<0.01 or **p<0.001, according to

eTABLE 2

ANATOMIC DISTRIBUTION OF REDUCED FRACTIONAL ANISOTROPY I

AMYOTROPHIC LATERAL SCLEROSIS AND 4R-TAU, AND REGRESSIO

ANALYSES RELATING ADJUSTED PTAU:TTAU TO FRACTIONAL ANISOTR

Neuroanatomic Region	**MNI Coordinate of peak voxel**			**Cluster Size (voxels)**	**Z sc**
	x	**y**	**z**		
ALS < Seniors					
L inferior frontal gyrus white matter	-37	16	19	3625	5.4
L middle frontal gyrus white matter	-22	21	30	481	5.1
Genu of corpus callosum	-6	33	9	1481	4.9
L inferior fronto-occipital fasciculus	-32	-4	-11	5599	4.8
L middle temporal gyrus white matter	-53	-20	-14	742	4.6
L anterior limb of internal capsule	-14	15	-2	1156	4.4
L inferior frontal gyrus white matter	-31	39	-6	965	4.4
L superior frontal gyrus white matter	-8	20	57	548	3.9
R cingulum	8	-15	32	551	3.8
Adjusted CSF ratio regression with FA in ALS					
L precentral gyrus white matter	-15	-22	61	512	4.0
Prefrontal centrum semiovale	-18	53	9	134	3.6
Body of corpus callosum	0	8	25	60	3.6

4R-Tau < Seniors					
Genu of corpus callosum	-7	31	9	13186	5.59
L anterior limb of internal capsule	-14	8	1	1114	5.23
L inferior frontal gyrus white matter	-50	12	11	1638	4.94
L posterior limb of internal capsule	-7	-4	12	519	4.92
L cerebral peduncle	-17	-13	-17	1274	4.91
R ansa lenticularis	18	-5	-12	224	4.61
L posterior corona radiata	-21	-39	33	320	4.55
R column and body of fornix	2	-4	15	374	4.47
L superior longitudinal fasciculus	-49	3	30	216	4.41
L postcentral gyrus white matter	-43	-15	27	410	4.30
L superior frontal gyrus white matter	-13	10	48	297	4.27
Splenium of corpus callosum	28	-57	21	462	4.14
Adjusted CSF Ratio Regression with FA in 4R-Tau					
L midbrain	-5	-19	-13	368	3.40
R uncinate fasciculus	10	46	-16	78	3.29
L cerebral peduncle	-14	-24	-10	100	3.14

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eTABLE 2

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