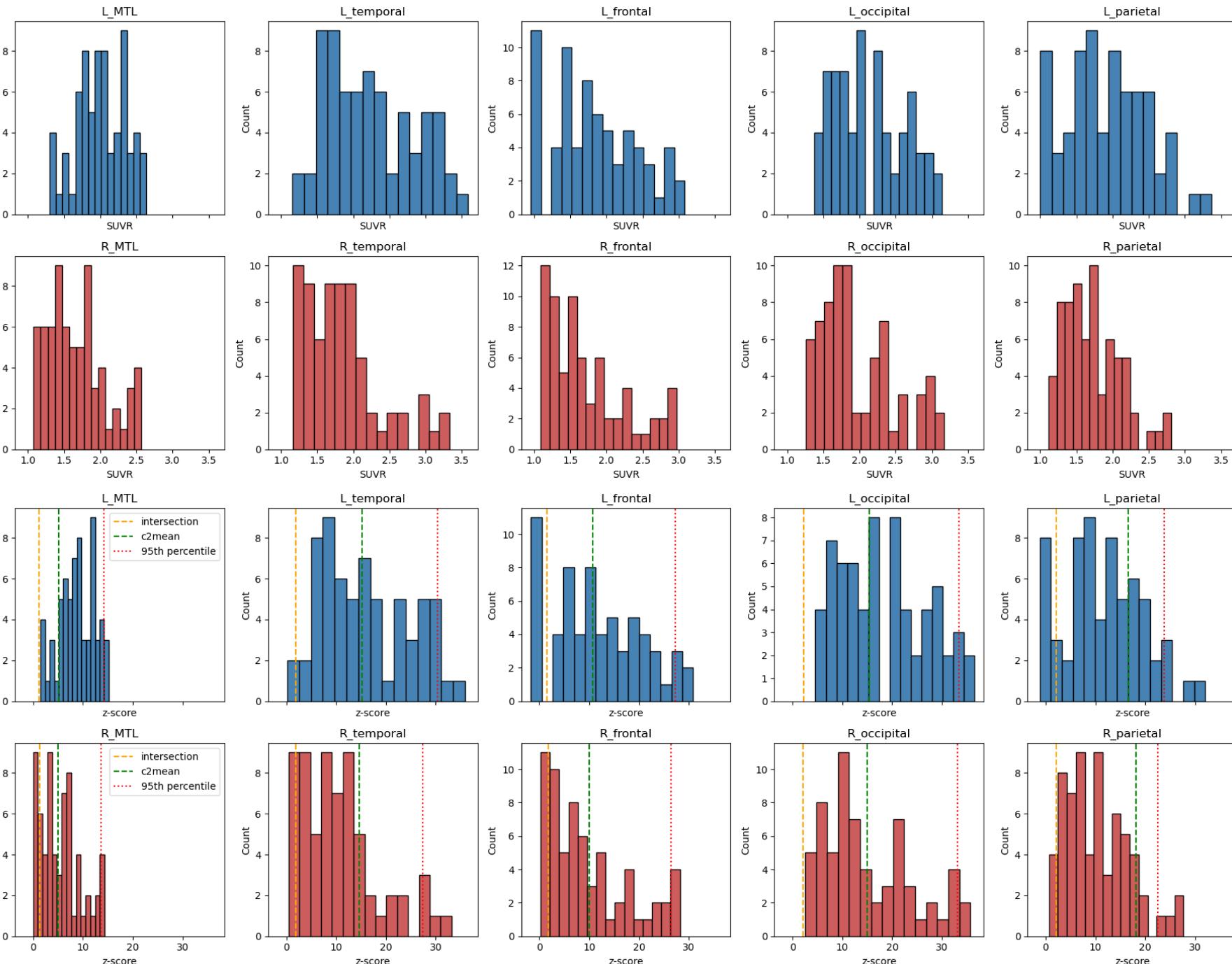
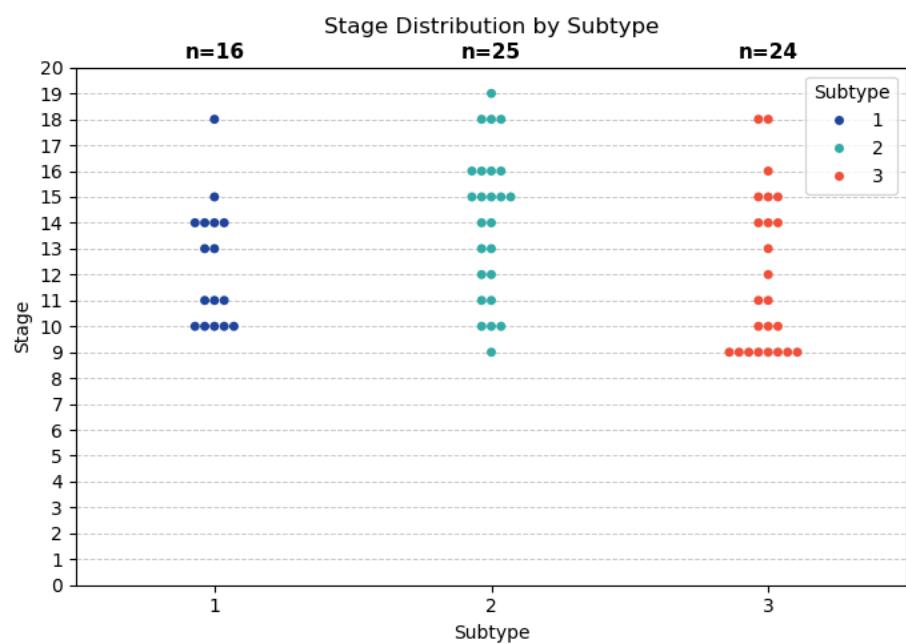
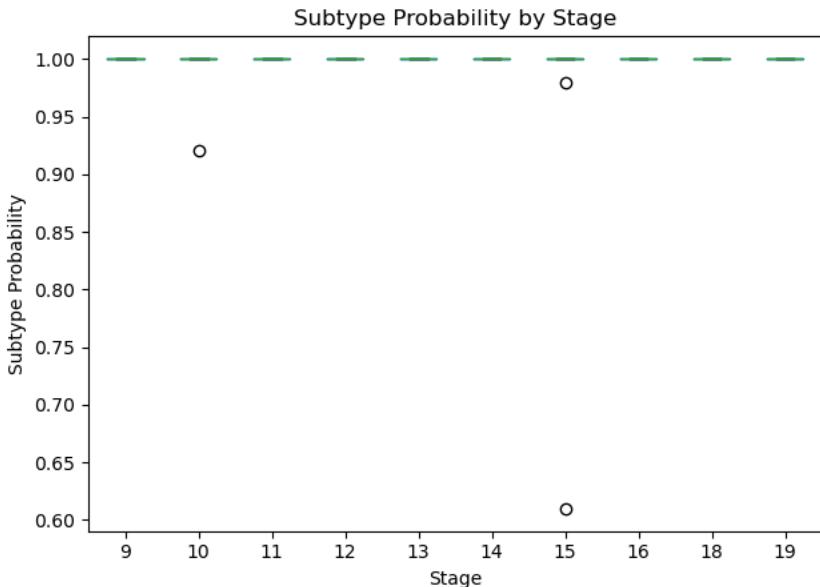


# SUVR (Top) and z-score (Bottom) + thresholds

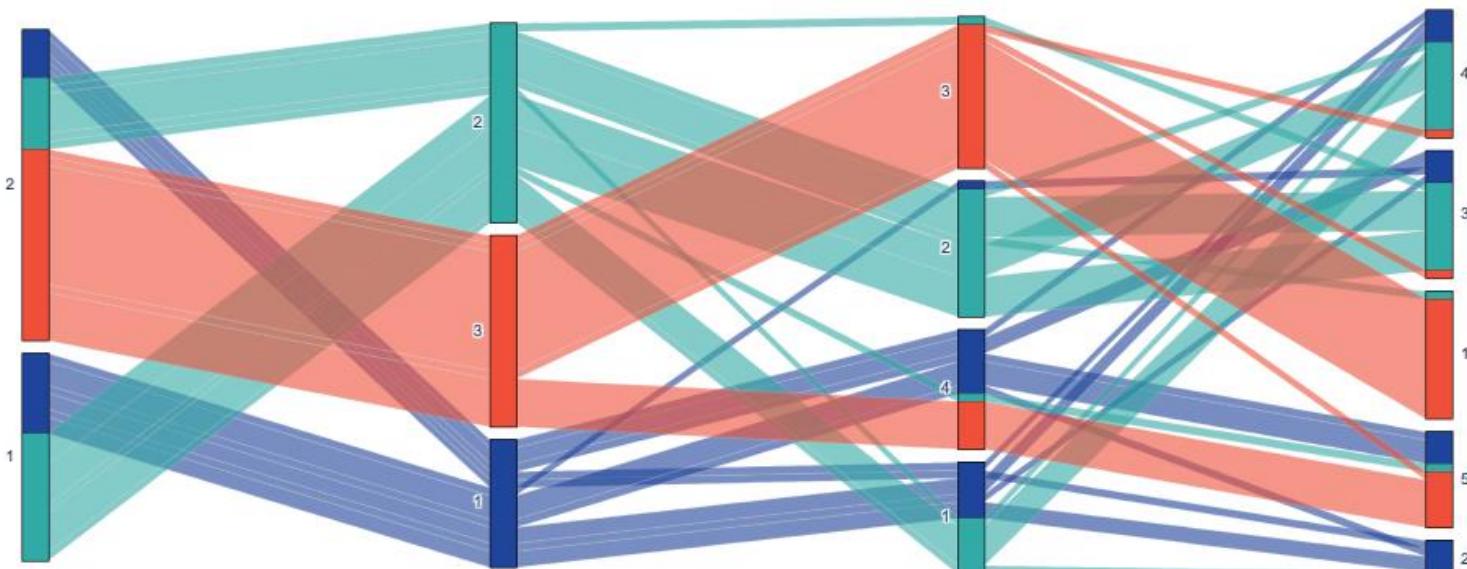


## Subtype and staging

The one < 0.7 here are amnestic/S1 stage 15



No exclusion by model fit (<50%)



Assignment change (order by prevalence)

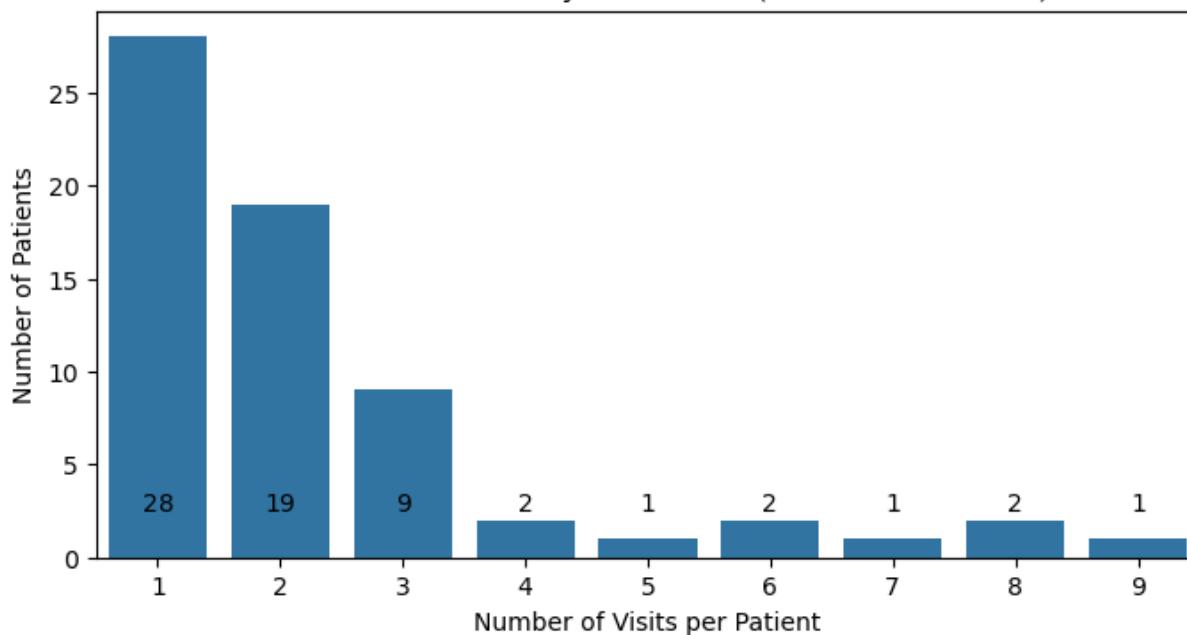
Table one

- No significant differences in age, years of educ., sex, clinical stage, APOE status, centiloid or FTP SUVR measures.
- SuStAln stage: S2 has higher average.
- Clinical phenotypes: S3 has most PCA and S2 has most PPA, but these two phenotypes were spread out across S2/S3.
- S1 is mostly amnestic, but is now the least prevalent with lower subtype probability
- No significant differences ( $p > 0.05$ ), but S2 performs worse on Digit span, semantic fluency, CVLT, Trail, MMSE, and CDRSB.
- S1 seems more preserved on Benson figure while S1 and S2 have similar average

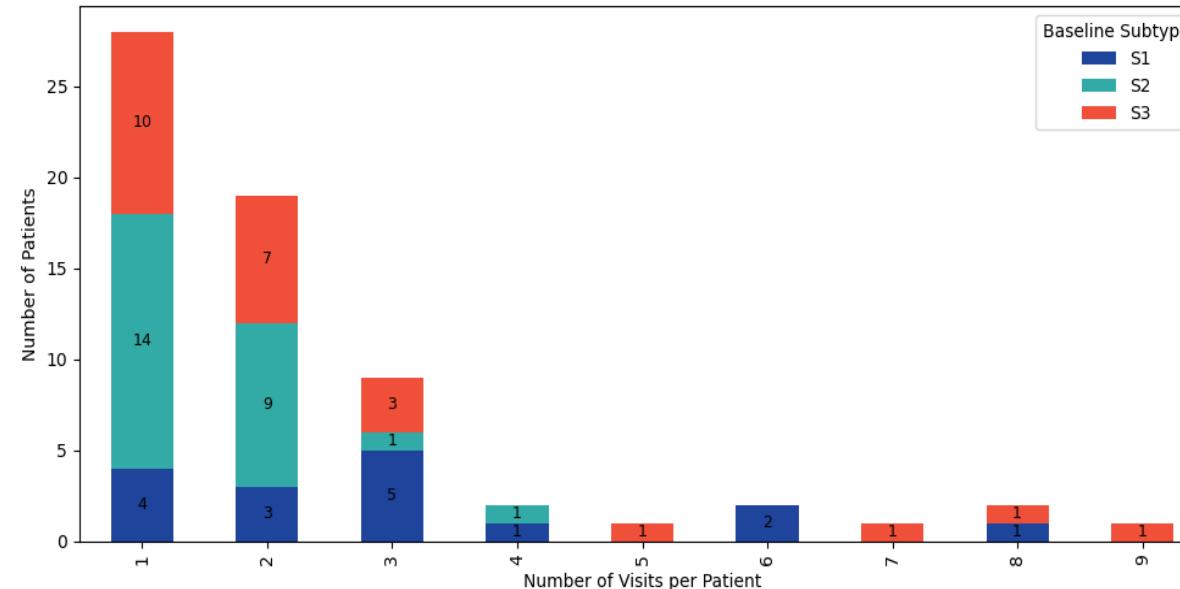
	n	Missing	Overall	1	2	3	P-Value
age, mean (SD)	0	65	58.0 (4.3)	57.7 (5.0)	57.7 (4.4)	58.4 (3.8)	0.818
stage, mean (SD)	0	16	12.9 (2.9)	12.4 (2.4)	14.0 (2.9)	12.0 (3.1)	0.035
Trails, mean (SD)	24	25	80.9 (39.5)	65.2 (42.4)	92.5 (35.8)	79.0 (39.8)	0.227
MMSETot, mean (SD)	5	24	21.1 (6.1)	22.5 (6.7)	19.1 (7.0)	22.0 (4.4)	0.171
CDRSUM, mean (SD)	5	24	4.2 (2.4)	4.2 (2.7)	4.5 (2.4)	4.0 (2.4)	0.841
DigitFW, mean (SD)	6	24	5.3 (1.4)	5.7 (1.5)	5.0 (1.4)	5.3 (1.3)	0.358
DigitBW, mean (SD)	8	24	3.5 (1.6)	3.9 (1.8)	3.1 (1.8)	3.5 (1.1)	0.310
SemanticFluency, mean (SD)	8	24	11.6 (5.8)	12.8 (5.7)	9.8 (5.0)	12.6 (6.4)	0.200
BensonCopy, mean (SD)	5	24	10.8 (5.3)	12.3 (4.4)	10.7 (5.5)	9.9 (5.7)	0.429
BensonDelay, mean (SD)	6	24	4.8 (4.2)	5.8 (4.3)	4.4 (4.3)	4.6 (4.2)	0.596
CVLT, mean (SD)	4	24	2.4 (2.8)	2.7 (3.1)	1.5 (2.1)	3.2 (3.0)	0.104
Educ, mean (SD)	3	24	16.5 (2.8)	16.2 (2.5)	16.2 (2.7)	17.0 (3.1)	0.588
subtype_prob, mean (SD)	0	24	1.0 (0.0)	1.0 (0.1)	1.0 (0.0)	1.0 (0.0)	0.123
cortical_ftp_suvr, mean (SD)	0	24	1.9 (0.4)	1.9 (0.4)	2.0 (0.4)	1.9 (0.4)	0.770
Centiloid, mean (SD)	0	24	100.8 (29.9)	99.2 (36.3)	105.5 (32.5)	96.8 (22.1)	0.583
metaROI_FTP_SUVR, mean (SD)	0	24	2.2 (0.5)	2.1 (0.5)	2.2 (0.5)	2.2 (0.5)	0.778
cortical_summary_PiB_SUVR, mean (SD)	0	24	2.1 (0.3)	2.1 (0.4)	2.2 (0.3)	2.1 (0.2)	0.583
sex, n (%)							
	Female		38 (58.5)	9 (56.2)	16 (64.0)	13 (54.2)	0.767
	Male		27 (41.5)	7 (43.8)	9 (36.0)	11 (45.8)	
ucsf_dx, n (%)	amnestic		34 (52.3)	11 (68.8)	13 (52.0)	10 (41.7)	0.634
	nonamnestic		7 (10.8)	1 (6.2)	2 (8.0)	4 (16.7)	
	pca		12 (18.5)	2 (12.5)	4 (16.0)	6 (25.0)	
	ppa		12 (18.5)	2 (12.5)	6 (24.0)	4 (16.7)	
clin_severity, n (%)	MCI		10 (15.4)	4 (25.0)	2 (8.0)	4 (16.7)	0.331
	dementia		55 (84.6)	12 (75.0)	23 (92.0)	20 (83.3)	
APOEStatus, n (%)	carrier		37 (56.9)	11 (68.8)	15 (60.0)	11 (45.8)	0.331
	non-carrier		28 (43.1)	5 (31.2)	10 (40.0)	13 (54.2)	

## Longitudinal (CDR) – follow up

Number of Patients by Total Visits (CDR-SB measured)



Number of Patients by Total Visits (CDR-SB measured), Stratified by Baseline Subtype



37 participants (pretty evenly split among subtypes) with at least two CDR-SB recorded

Follow-up intervals:

Overall:  $0.85 \pm 0.83$

S1:  $0.75 \pm 0.65$

S2:  $1.43 \pm 0.83$

S3:  $0.72 \pm 0.89$

This is not matched on taudate!

Just grabbing whatever exist for the baseline cohort I have

PIDN	DCDate	AgeAtDC	InstrID	CDRSUM
18551	2015-07-27	60	406595	3.5
18551	2016-01-07	60	382270	4.5
18551	2016-04-01	60	403877	4.5
18551	2016-04-29	60	408377	5.0
18551	2016-05-27	60	411519	6.0
18551	2016-06-24	61	412124	5.0
18551	2016-07-11	61	413653	4.0
18551	2017-07-20	62	468423	5.0
18551	2018-07-10	63	497140	6.0

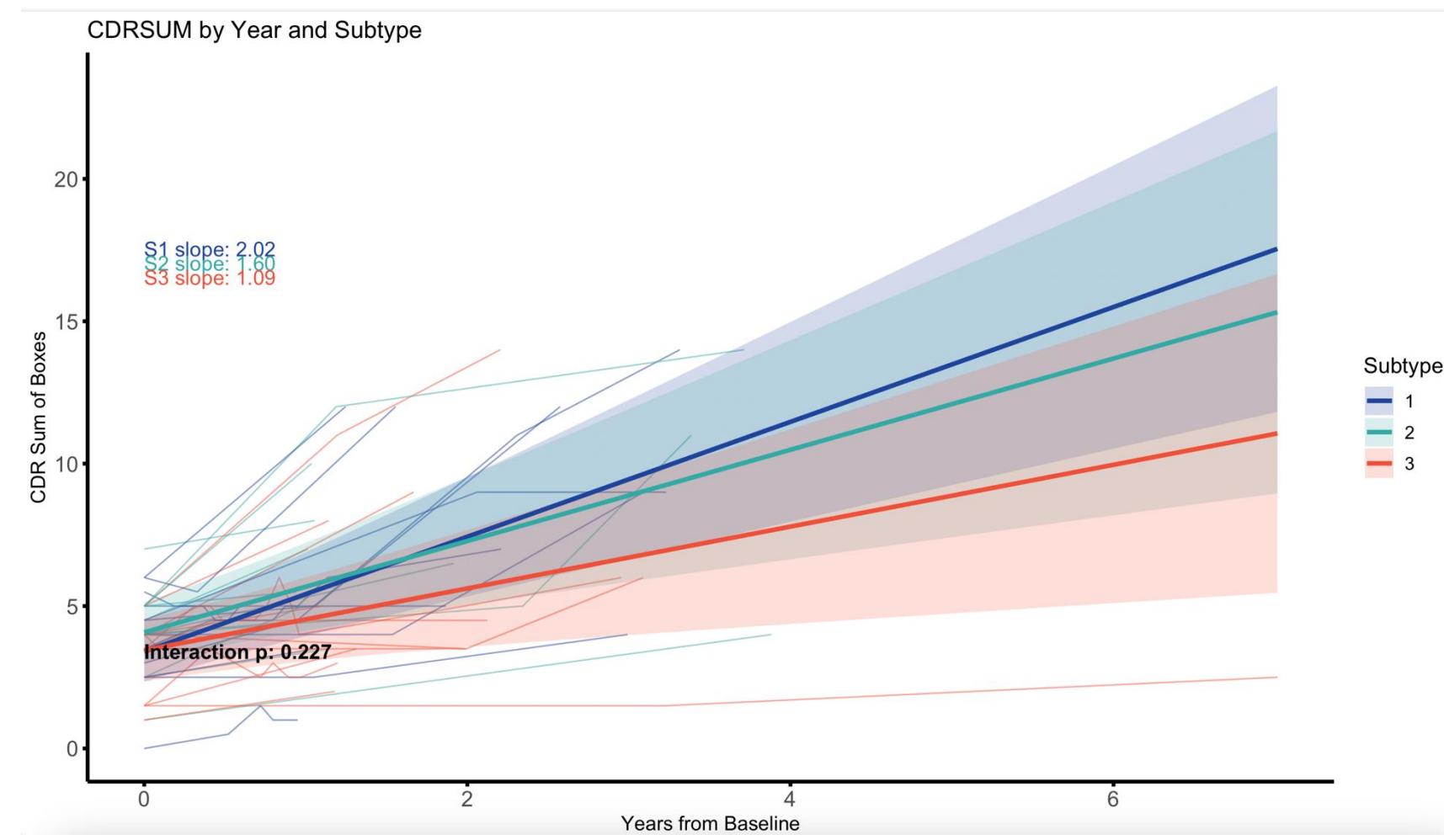
The one having 9 records (S3 – amnestic - 60 at baseline) seems valid but it's not at annual interval

## Longitudinal (CDR) – model

Model: CDR-SB ~ baseline subtype \* time from baseline + baseline age + baseline sex + baseline Centiloid + baseline years of education + (1 + time | PIDN)

PIDN	DCDate	AgeAtDC	InstrID	CDRSUM
133	24581	2017-06-22	62	455094
134	24581	2017-06-22	62	491981

Actually it's **n = 36** because one (S3 – amnestic) patient has duplicates  
**# record = 120**



Patient 17177 has the longest span: 2562 days (7.01 years)

The flat line at the bottom:

PIDN	baseline_subtype	DCDate	CDRSUM	baseline_sex	baseline_Educ	baseline_Centiloid	baseline_age	diff_yr	visit_ct
12	17177	2015-09-09	1.5	Male	22.0	32.192797	64	0.000000	1
13	17177	2018-11-30	1.5	Male	22.0	32.192797	64	3.225188	2
14	17177	2022-09-14	2.5	Male	22.0	32.192797	64	7.014374	3