Project1

1/15/2017

Table 1: Comparison of Demographics for Excluded & Included Data, w/ N=162 and N=174 respectively

Variable	Excluded	Analyzed Data	P-Value
Diff. in mean SBP, wake - sleep, self-reported periods	14.5 (10.5)	13.4 (9.4)	0.6075
systolic.post.wake.mean minus systolic.pre.wake.mean	11.1 (12.3)	12.3 (12.2)	0.4331
systolic.post.wake.1 minus systolic.pre.wake.1	8.6 (14.2)	8.4 (13.6)	0.8162
ICV (calculated)	1403.7 (144.4)	1364.9 (138.4)	0.0247
Education (years)	16.3 (2.6)	15.5 (2.6)	0.0095
Age at medhx.date, recalculated	73.1 (7.5)	72.7 (7.1)	0.6214
Sex			0.0103
– Male	108 (67%)	91 (52%)	
– Female	54 (33%)	83 (48%)	
Two-level race/ethnicity			0.3688
– Non-Hispanic White	137 (85%)	154 (89%)	
– Other	25 (15%)	20 (11%)	
ApoE4+ (at least one E4 allele)			0.7182
– Yes	58 (36%)	58 (33%)	
– No	104 (64%)	116 (67%)	
Consensus Decision for Diagnosis			0.1202
– Normal	75 (46%)	101 (58%)	
– MCI	70 (43%)	62 (36%)	
– Dementia	1 (1%)	0 (0%)	
– Ambiguous At Risk	16 (10%)	11 (6%)	
Taking at least 1 anti-hypertensive med			0.622
– Yes	85 (52%)	97 (56%)	
– No	77 (48%)	77 (44%)	
Diabetic, determined by a1c, glucose, and/or rx			0.1947
– Yes	35 (22%)	27 (16%)	
– No	127 (78%)	147 (84%)	
Current smoker (or quit in this or last calendar yr)			0.3898
– Yes	5 (3%)	2 (1%)	
– No	157 (97%)	172 (99%)	
CVD, determined from variables in med hx			0.622
– Yes	4 (2%)	7 (4%)	
– No	158 (98%)	167 (96%)	
A-fib, determined by med hx and/or echo and/or cmr rhythm			1
– Yes	9 (6%)	10 (6%)	
– No	151 (93%)	164 (94%)	
LV hypertrophy, determined by sex and scaled LV mass			0.6958
– Yes	9 (6%)	7 (4%)	
– No	153 (94%)	166 (95%)	

```
cats <- cats[-4]
comparison <- c(c(), c(), c(),c())
mciData <- cvrdata[cvrdata$enrolled.dx.factor=="MCI",]
normData <- cvrdata[cvrdata$enrolled.dx.factor=="Normal",]
```

```
abData <- cvrdata[cvrdata$enrolled.dx.factor=="Ambiguous At Risk",]
ms <- length(mciData$map.id)
ns <- length(normData$map.id)
as <- length(abData$map.id)
for (cat in cats){
  if (is.factor(cvrdata[,cat])){
    comparison <- rbind(comparison, c(label(cvrdata[,cat]),'','',''))
    for (lev in levels(cvrdata[,cat])){
      comparison <- rbind(comparison, c(paste("--",lev ),
                      paste(s <- sum(normData[,cat]==lev, na.rm=T), " (", round(s*100/ms),
                            "%)", sep=""),
                      paste(s <- sum(mciData[,cat]==lev, na.rm=T), " (", round(s*100/ns),
                            "%)", sep=""),
                      paste(s <- sum(abData[,cat]==lev, na.rm=T), " (", round(s*100/as),
                            "%)", sep="")))
    }
    next
  }
  comparison <- rbind(c(label(cvrdata[,cat]),
                paste(round(mean(normData[,cat], na.rm=T),1)," (",
                      round(sd(normData[,cat],na.rm=T),1), ")",sep=""),
                paste(round(mean(mciData[,cat], na.rm=T),1)," (",
                      round(sd(mciData[,cat],na.rm=T),1), ")",sep=""),
                paste(round(mean(abData[,cat], na.rm=T),1)," (",
                      round(sd(abData[,cat],na.rm=T),1), ")",sep="")), comparison)
}
comparison <- as.data.frame(comparison)
colnames(comparison) <- c("Variable","Normal", "MCI", "Ambiguous At-Risk")
kable(comparison, width=3,
      caption=paste("Comparison of Demographics across Disease Status, w/ N=",
                    length(normData$map.id), ", N=", length(mciData$map.id),", and N=",
                    length(abData$map.id), " respectively", sep=""))
```

Table 2: Comparison of Demographics across Disease Status, w/ N=101, N=62, and N=11 respectively

Variable	Normal	MCI	Ambiguous At-Risk
Diff. in mean SBP, wake - sleep, self-reported periods	15.3 (9.4)	9.5 (8.7)	17.7 (6.2)
systolic.post.wake.mean minus systolic.pre.wake.mean	14.1 (12.9)	8.9 (10.3)	12.4 (11.9)
systolic.post.wake.1 minus systolic.pre.wake.1	11.4 (12.9)	3.7 (12.5)	4.9 (18.7)
ICV (calculated)	1369.2 (140)	1345.9 (135.9)	1431.9 (122.9)
Education (years)	16.1 (2.4)	14.6 (2.6)	15.5 (3.3)
Age at medhx.date, recalculated	72.6 (7.3)	73.2 (7.2)	71.4 (4.8)
Sex			
– Male	53 (85%)	31 (31%)	7 (64%)
– Female	48 (77%)	31 (31%)	4 (36%)
Two-level race/ethnicity			
– Non-Hispanic White	90 (145%)	54 (53%)	10 (91%)
– Other	11 (18%)	8 (8%)	1 (9%)
ApoE4+ (at least one E4 allele)			
– Yes	34 (55%)	22 (22%)	2 (18%)
– No	67 (108%)	40 (40%)	9 (82%)
Taking at least 1 anti-hypertensive med			

Variable	Normal	MCI	Ambiguous At-Risk
– Yes	55 (89%)	36 (36%)	6 (55%)
– No	46 (74%)	26 (26%)	5 (45%)
Diabetic, determined by a1c, glucose, and/or rx			
– Yes	12 (19%)	11 (11%)	4 (36%)
– No	89 (144%)	51 (50%)	7 (64%)
Current smoker (or quit in this or last calendar yr)			
– Yes	0 (0%)	2 (2%)	0 (0%)
– No	101 (163%)	60 (59%)	11 (100%)
CVD, determined from variables in med hx			
– Yes	5 (8%)	2 (2%)	0 (0%)
– No	96 (155%)	60 (59%)	11 (100%)
A-fib, determined by med hx and/or echo and/or cmr rhythm			
– Yes	4 (6%)	4 (4%)	2 (18%)
– No	97 (156%)	58 (57%)	9 (82%)
LV hypertrophy, determined by sex and scaled LV mass			
– Yes	3 (5%)	3 (3%)	1 (9%)
– No	97 (156%)	59 (58%)	10 (91%)

Missingness

Table 3: Missingness (N=174)

Variable	Missingness
Sex	0 (0%)
Two-level race/ethnicity	0 (0%)
ApoE4+ (at least one E4 allele)	0 (0%)
Taking at least 1 anti-hypertensive med	0 (0%)
Diabetic, determined by a1c, glucose, and/or rx	0 (0%)
Current smoker (or quit in this or last calendar yr)	0 (0%)
CVD, determined from variables in med hx	0 (0%)
A-fib, determined by med hx and/or echo and/or cmr rhythm	0 (0%)
LV hypertrophy, determined by sex and scaled LV mass	1 (0.57%)
Age at medhx.date, recalculated	0 (0%)
Education (years)	0 (0%)
ICV (calculated)	0 (0%)
systolic.post.wake.1 minus systolic.pre.wake.1	23 (13.22%)
systolic.post.wake.mean minus systolic.pre.wake.mean	27 (15.52%)
Diff. in mean SBP, wake - sleep, self-reported periods	15 (8.62%)