**ARIC Medication Data Results: Anticholinergic burden**

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| --- | --- | --- | --- |
| Anticholinergic Drug Burden | Robust | Pre-frail | Frail |
| mean(SE) | 1.23(0.03) | 1.78(0.03) | 2.37(0.09) |

Summary: \*t-test= ARIC Significant difference between race and ACB = sig. (p=.008), mean(SD) Black/AA 1.67(1.48) and White 1.53(1.93)

Table 1. ARIC: Generalized linear regression results: association with anticholinergic burden and frailty status vs. robust adults

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| --- | --- | --- | --- | --- | --- | --- |
| Phenotype | (n) | Beta Coef | Std. Error | Odds Ratio | 95% CI | p-value |
| Pre-frail | 3050 | 0.11 | 0.02 | 1.126 | 1.08-1.18 | < .0001 (1.11e-07) |
| Frail | 433 | 0.23 | 0.04 | 1.26 | 1.17-1.36 | < .0001 (7.84e-10) |

*Notes:* Odds ratio equals the factor by which the predicted odds change when ACB increases by 1 unit

Covariates = gender, age\*(p= 2.44e-14), education\* (p= .0004), CESD, dementia\* (p= .0002), Parkinson’s

Table 2. ARIC: Ordinal regression model: association with anticholinergic burden and phenotype vs healthy controls

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| --- | --- | --- | --- | --- |
| Full Model | Beta Co-efficient | SE | t.value | p-value |
| Anticholinergic Drug Burden | 0.135 | 0.019 | 7.11 | < .0001 |
| Gender | -0.19 | 0.07 | -2.57 | .01 |
| Age | 0.07 | 0.01 | 10.80 | < .0001 |
| Education | -0.03 | 0.01 | -4.32 | < .0001 |
| Depression | 1.94 | 0.35 | 5.43 | < .0001 |
| Dementia | 0.59 | 0.13 | 4.586 | < .0001 |
| Parkinson’s Disease | 0.29 | 0.31 | 0.97 | 0.33 |
| Phenotype | Odds Ratio | SE | 95% CI | p-value |
| Robust to Pre-frail | 7.50 | 0.74 | 1.07-1.37 | <.0001 |
| Pre-frail to Frail | 10.43 | 0.75 | 1.87-1.50 | <.0001 |

Covariate factors added to model

Table 3. ARIC Ordinal regression model: association with anticholinergic burden and phenotype vs healthy controls

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Full Model | Beta Co-efficient | SE | t.value | p-value |
| Anticholinergic Drug Burden | 0.17 | 0.012 | 13.76 | <.0001 |
| Phenotype | Odds Ratio | Std. Error | 95% CI | p-value |
| Robust to Pre-frail | 0.12 | 0.03 | 1.07-1.37 | <.0001 |
| Pre-frail to Frail | 2.97 | 0.06 | 1.87-1.50 | <.0001 |

Covariate factors not in model

ACB and Race (black/AA)

Questions for why is the are rates higher by race?

Ho 1: higher rates of chronic diseases?

Ho 2: types of chronic diseases?

Ho 3: prescribing practices?

(Ho: genetic variant differences)