Table 3. Mixed effect Poisson regression of cognitive status on genetic factors and lifetime incarceration (Observations=34,492; Cases=4,392)

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
Variable[1]	**IRR**[2,3]	**95% CI**[3]	**IRR**[2,3]	**95% CI**[3]	**IRR**[2,3]	**95% CI**[3]	**IRR**[2,3]	**95% CI**[3]	**IRR**[2,3]	**95% CI**[3]	**IRR**[2,3]	**95% CI**[3]
AD PGS (z-score)	1.02	[0.96, 1.09]			1.02	[0.95, 1.08]			1.02	[0.95, 1.08]	1.02	[0.96, 1.10]
APOE-4 allele count												
one copy			1.22*	[1.04, 1.43]	1.22*	[1.04, 1.43]			1.21*	[1.03, 1.42]	1.18	[1.00, 1.39]
two copies			1.55	[0.98, 2.45]	1.54	[0.97, 2.44]			1.55	[0.98, 2.46]	1.61*	[1.00, 2.59]
Lifetime incarceration												
Incarcerated							2.13***	[1.67, 2.73]	2.13***	[1.67, 2.72]	2.01***	[1.51, 2.67]
Lifetime Incarceration*APOE-4 allele count												
Incarcerated * one copy											1.31	[0.76, 2.27]
Incarcerated * two copies											0.63	[0.10, 3.93]
Lifetime Incarceration*AD PGS (z-score)												
Incarcerated * AD PGS (z-score)											0.90	[0.70, 1.16]

[1] All models also adjusted for age, sex, smoking history, stroke history, and social origins index.
[2] *p<0.05; **p<0.01; ***p<0.001
[3] IRR = Incidence Rate Ratio, CI = Confidence Interval