

**S1 Table.**

Outcome	Model (R function)	Covariates Included in Model*
FEV <sub>1</sub> %	Linear regr. (lm)	Intercept only
FEV <sub>1</sub> /FVC	Beta regr. (betareg)	Age, Sex
Frac. Emph.	Beta regr. (betareg)	Age, Sex, FEV <sub>1</sub> %, BMI, Smok. Status**

\* All models include an intercept term.

\*\* Only COPDGene data is adjusted for smoking status, since only this cohort has current smokers.