ML exploration results : comparing (10 phenotypes of AAM) x (4 ML models) (a) X = MRI features at age 22 (FU3) (b) X = MRI features at age 19 (FU2) Frequency Frequency ML models  $(n \sim 709)$  $(n \sim 698)$ LR **Amount Amount** SVM-lin  $(n \sim 585)$  $(n \sim 572)$ SVM-rbf Onset Onset GB (n ~ 697) (n ~ 666) chance Binge Binge  $(n \sim 650)$  $(n \sim 634)$ Binge growth  $(n \sim 570)$  $(n \sim 679)$ **AUDIT AUDIT**  $(n \sim 708)$  $(n \sim 705)$ **AUDIT** quick  $(n \sim 623)$  $(n \sim 628)$ AUDIT growth  $(n \sim 589)$  $(n \sim 713)$ Combined seo

