

**Figure S6.** End—of—treatment quit rates by treatment group and metabolizer group: Cross—ancestry wGRS tested. Odds ratios (OR) with 95% confidence intervals (CI) comparing the efficacy of varenicline versus the nicotine patch. Metabolizer—by—treatment interaction effects on end—of—treatment quit rates evaluated by the ratio of odds ratios (ORR) with 95% CI. Stratification by the cross—ancestry wGRS in the (A) merged EUR and AFR subset of the varenicline and nicotine patch treatment arms (N=679), (B) AFR subset (N=275), and (C) EUR subset (N=404) (slow: wGRS< 2.221, normal: wGRS $\geq$ 2.221).