



S4 Fig. Diversity at week 0 and week 12 stratified on randomization.

The observed OTUs (A) and Shannon index (B) at week 0 and week 12 stratified by randomisation. When comparing the change in the observed OTU from week 0 to week 12 in the varenicline group to the change in the placebo group there is no significant difference (A) ($p = 0.45$, unpaired t-test of the within-patient change from week 0 to week 12 in the varenicline group compared to the within-patient change in the placebo group). Similarly, when comparing the change in Shannon index from week 0 to week 12 in the varenicline group to the change in the placebo group there is no significant difference (B) ($p = 0.61$, unpaired t-test of the within-patient change from week 0 to week 12 in the varenicline group compared to the within-patient change in the placebo group). The solid crossbars mark the mean of the distributions.