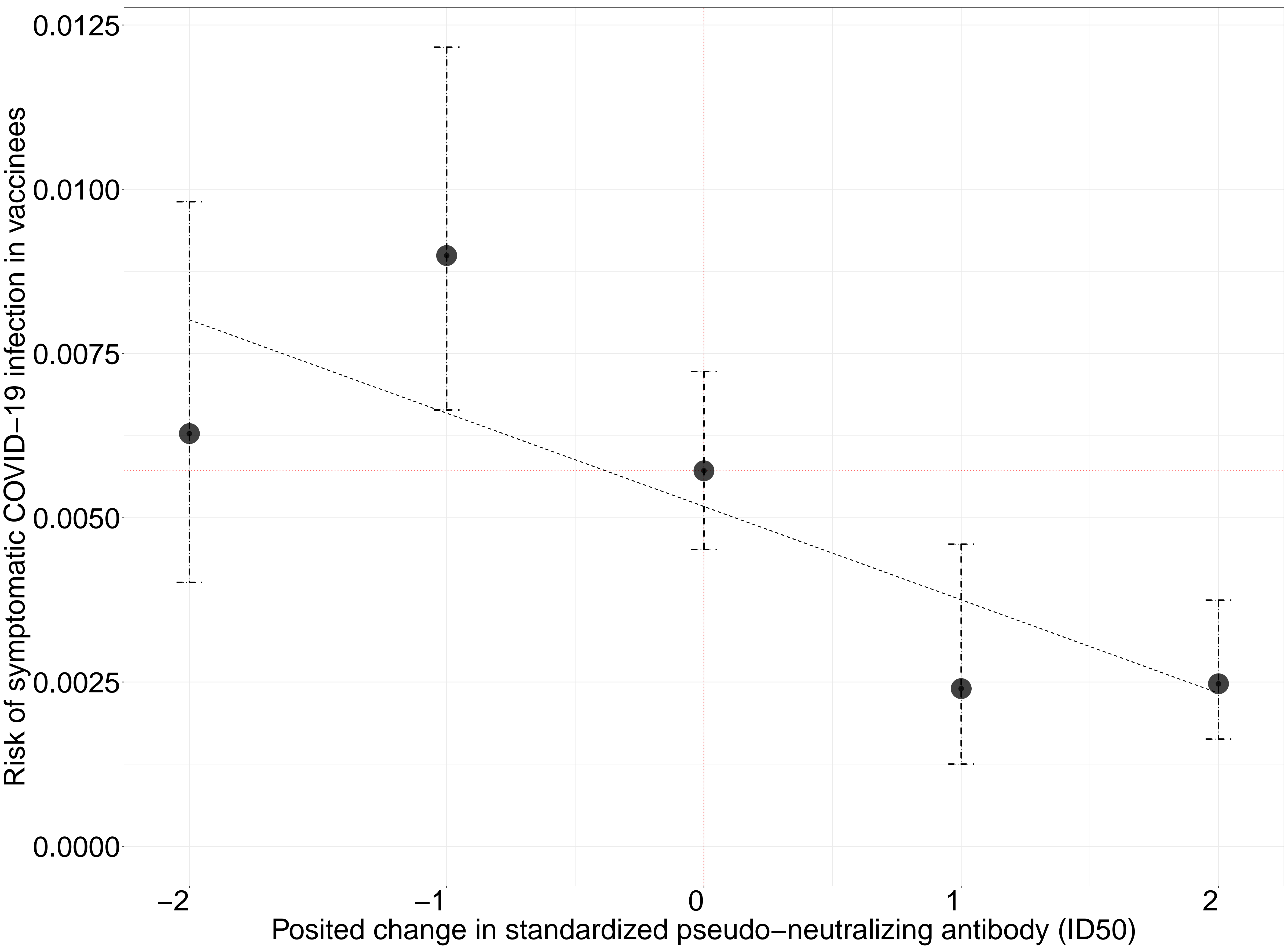


# Estimated counterfactual risk of symptomatic COVID–19 infection at Day 29

working MSM summary: ( $\hat{\beta}_{\text{TMLE}} = -0.0014$ , p-value =  $2\text{e-}04$ )



Mean counterfactual COVID–19 infection risk across standardized shifts in pseudo–neutralizing antibody (ID50) levels, summarized by projection of causal dose–response curve onto a linear working model.