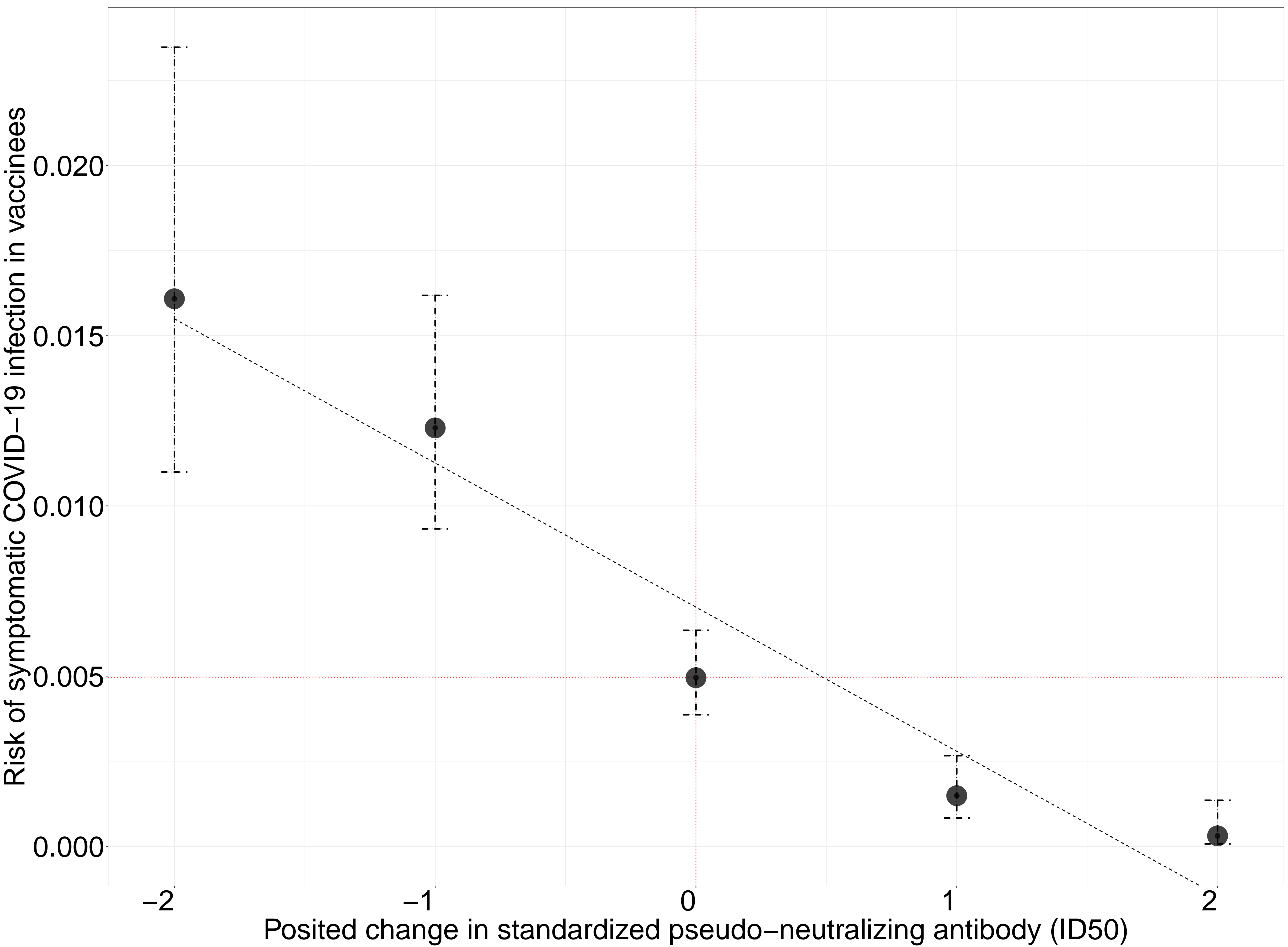


# Estimated counterfactual risk of symptomatic COVID–19 infection at Day 57

working MSM summary: ( $\hat{\beta}_{\text{TMLE}} = -0.0042$ , p–value = 0)



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.