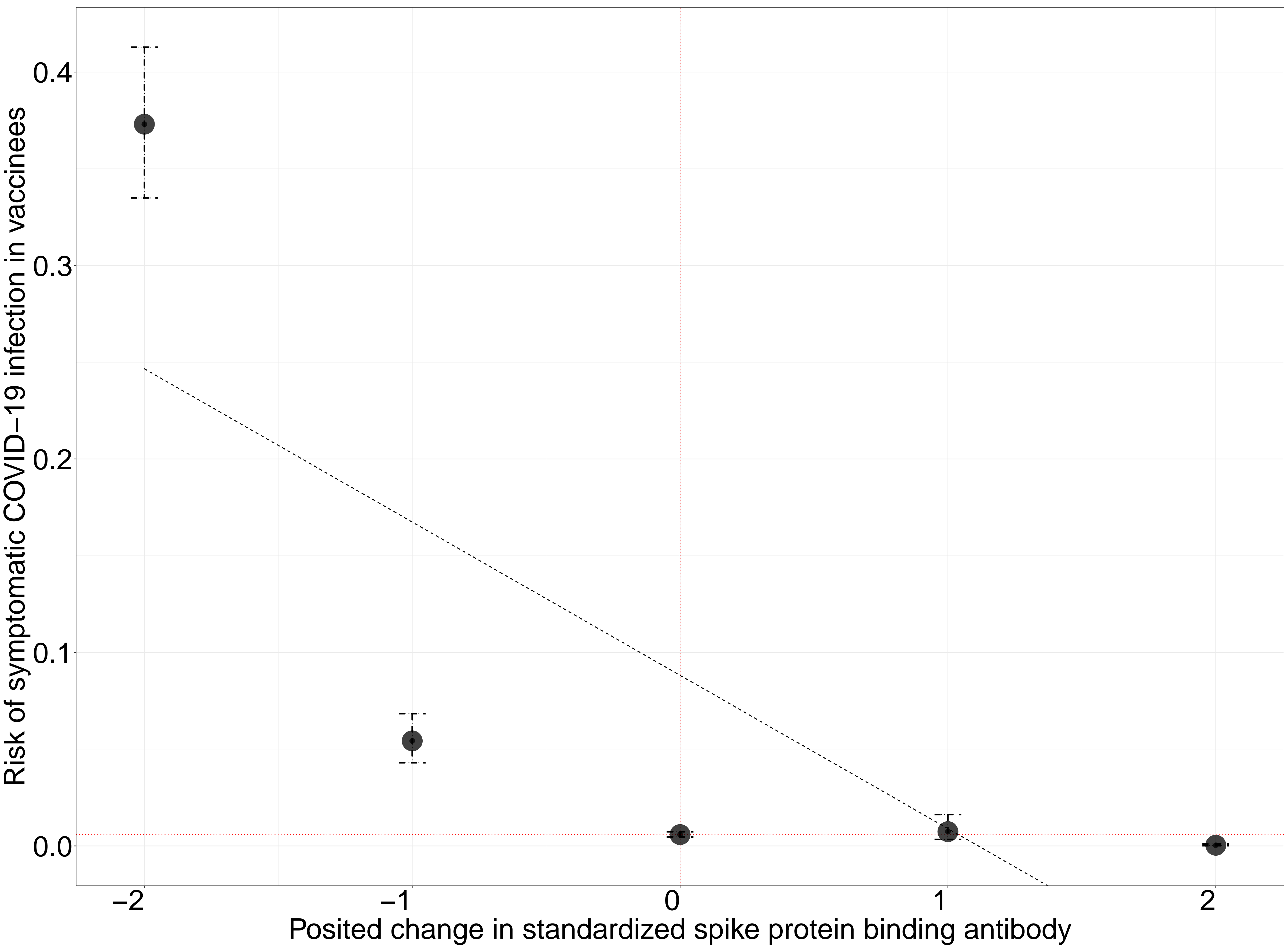


# Estimated counterfactual risk of symptomatic COVID–19 infection at Day 29

working MSM summary: ( $\hat{\beta}_{\text{TMLE}} = -0.0792$ , p-value = 0)



Mean counterfactual COVID–19 infection risk across standardized shifts in spike protein binding antibody levels, summarized by projection of causal dose–response curve onto a linear working model.