Weekly excess deaths were allowed to be negative GAM LGM AVC **AVR** SRF Cumulative number of excess deaths 30,000 20,000 20,291 19,644 18,340 18,273 8,144-34,619 13,005-24,713 14,553-22,875 Female 13,228-23,290 10,000 7,609 2,818-13,356 -10,000 30,000-30,585 25,773-33,761 23,700 22,936 22,995 20,000 -20,668-26,142 19,153-26,109 13,065-30,801 Male 10,000 -9,308 5,468-13,372 -10,000 Jun Aug Oct Dec Apr Jun Aug Oct Dec Apr Jun Aug Oct Dec Oct Dec Apr Jun Aug Oct Dec 95 and 50% prediction intervals AVC: 5 year avg. weekly death counts

Cumulative excess deaths Germany 2020w8 through 2020w52 under different baseline models

GAM: Quasi-Poisson regression with smooth seasonality and control for mortality trends and population structure LGM: Quasi-Poisson regression with smooth seasonality, autocorrelation, and control for mortality trends and population structure SRF: Quasi-Poisson regression in Serfling specification trained on all weeks with control for population structure