## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1

Description: The relative reduction data underlying Figure 2.

File Name: Supplementary Data 2

Description: The relative reduction data underlying Figure 3.

File Name: Supplementary Data 3

Description: Estimates of interaction between vaccination and previous infection status, and

age.

File Name: Supplementary Data 4
Description: Data underlying Figure 1.

File Name: Supplementary Data 5

Description: Accession IDs available in the GISAID database of the WGS data used in this

study.