**Supplementary Table S1.** Strain-specific HI titre was modeled as a function of age at inclusion and age at the time of initial strain circulation (Models A1-4), or just age at study inclusion (Models B1-2) or just age at the time of initial strain circulation (Models C1-2). All models included a random subject and strain-specific intercept. Strain dependency was tested for all age variables in the three types of models. Models were compared using BIC; main model was selected based on lowest BIC (\*). †Difference in BIC with main model (Model C1) is shown.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model | Age at inclusion | Strain- dependent age at inclusion | Age at initial strain circulation | Strain-dependent age at initial strain circulation | BIC | Difference in BIC† |
| A1 | X | X | X | X | 5989.398 | 34.665 |
| A2 | X | X | X |  | 6022.962 | 68.229 |
| A3 | X |  | X | X | 5974.579 | 19.846 |
| A4 | X |  | X |  | 6240.559 | 285.826 |
|  |  |  |  |  |  |  |
| B1 | X | X |  |  | 6489.616 | 534.883 |
| B2 | X |  |  |  | 6464.879 | 510.146 |
|  |  |  |  |  |  |  |
| C1\* |  |  | X | X | 5954.733 | - |
| C2 |  |  | X |  | 6230.108 | 275.375 |