Supplementary File 4

Table S2: Parameter list

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| --- | --- | --- | --- | --- |
| **Data** | **Parameter** | **Value** | **Description** | **Source** |
| Model parameter | start\_year | 2004 | Starting year of model simulation | - |
| Transition rates (years-1) | f0f1 | 0.117 | Transition F0 to F1 | (Poovorawan et al., 2016) |
| f1f2 | 0.085 | Transition F1 to F2 |
| f2f3 | 0.12 | Transition F2 to F3 |
| f3c1 | 0.116 | Transition F3 to C1 |
| c1c2 | 0.044 | Transition C1 to C2 |
| c2c3 | 0.044 | Transition C2 to C3 |
| c3c4 | 0.076 | Transition C3 to C4 |
| c1bA | 0.0068 | Transition C1 to HCCA |
| c1bB | 0.0099 | Transition C1 to HCCB |
| c1bC | 0.0029 | Transition C1 to HCCC |
| c1bD | 0.0068 | Transition C1 to HCCD |
| c2bA | 0.0068 | Transition C2 to HCCA |
| c2bB | 0.0099 | Transition C2 to HCCB |
| c2bC | 0.0029 | Transition C2 to HCCC |
| c2bD | 0.0068 | Transition C2 to HCCD |
| dthc1 | 0.01 | Death from C1 |
| dthc2 | 0.01 | Death from C2 |
| dthc3 | 0.2 | Death from C3 |
| dthc4 | 0.57 | Death from C4 |
| dthbA | 1/(36/12) | Death from HCCA |
| dthbB | 1/(16/12) | Death from HCCB |
| dthbC | 1/(6/12) | Death from HCCC |
| dthbD | 1/(3/12) | Death from HCCD |
| dthtrn | 1/(240/12) | Death from liver transplant |
| tranc4 | 0.0015 | Liver transplant rate from C4 |
| tranbA | 0.0015 | Liver transplant rate from HCCA |
| tranbB | 0.0015 | Liver transplant rate from HCCB |
| Current treatment parameters | trt\_start | 15 | Start year of current DAA treatment (15 = 2019) | (Poovorawan et al., 2016) |
| sens | 0.985 | Sensitivity of screening process (simplified: combined tests) |

Table S2 (continued)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Screening probabilities | pF0scr | 1 | Probability of being screened in F0 if in screening programme | Assumed by model |
| pF1scr | 1 | Probability of being screened in F1 if in screening programme |
| pF2scr | 1 | Probability of being screened in F2 if in screening programme |
| pF3scr | 1 | Probability of being screened in F3 if in screening programme |
| pC1scr | 1 | Probability of being screened in C1 if in screening programme |
| pC2scr | 1 | Probability of being screened in C2 if in screening programme |
| pC3scr | 1 | Probability of being screened in C3 if in screening programme |
| pC4scr | 1 | Probability of being screened in C4 if in screening programme |
| Treatment efficacies | std\_cureF0 | 0.7 | Efficacy of old treatment of F0 (PEGs) | (Poovorawan et al., 2016) |
| std\_cureF1 | 0.7 | Efficacy of old treatment of F1 (PEGs) |
| std\_cureF2 | 0.7 | Efficacy of old treatment of F2 (PEGs) |
| std\_cureF3 | 0.7 | Efficacy of old treatment of F3 (PEGs) |
| std\_cureC1 | 0.7 | Efficacy of old treatment of C1 (PEGs) |
| new\_cureF0 | 0.985 | Efficacy of current treatment of F0 (DAAs) |
| new\_cureF1 | 0.985 | Efficacy of current treatment of F1 (DAAs) |
| new\_cureF2 | 0.985 | Efficacy of current treatment of F2 (DAAs) |
| new\_cureF3 | 0.985 | Efficacy of current treatment of F3 (DAAs) |
| new\_cureC1 | 0.985 | Efficacy of current treatment of C1 (DAAs) |
| new\_cureC2 | 0.985 | Efficacy of current treatment of C2 (DAAs) |
| new\_cureC3 | 0.985 | Efficacy of current treatment of C3 (DAAs) |
| new\_cureC4 | 0.985 | Efficacy of current treatment of C4 (DAAs) |

Table S2 (continued)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Screening strategy parameters | scr\_start | 19 | Start year of screening programme (19=2023) | Under test |
| scr\_dur | 5 | Duration of screening programme (years) | Under test |
| cov\_mean | 0.03 | Baseline coverage mean (assumed normal distribution) | Estimated by model |
| cov\_sd | 0.02 | Baseline coverage standard deviation (assumed normal distribution) | Estimated by model |
| cov\_lower | cov\_mean + 1.96\*cov\_sd | Lower bound for baseline coverage (95% CI) | Calculated |
| cov\_upper | cov\_mean - 1.96\*cov\_sd | Upper bound for baseline coverage (95% CI) | Calculated |
| coverage1 | 0.5 | Yearly screening coverage tested | Under test |
| coverage2 | 0.9 | Yearly screening coverage tested | Under test |