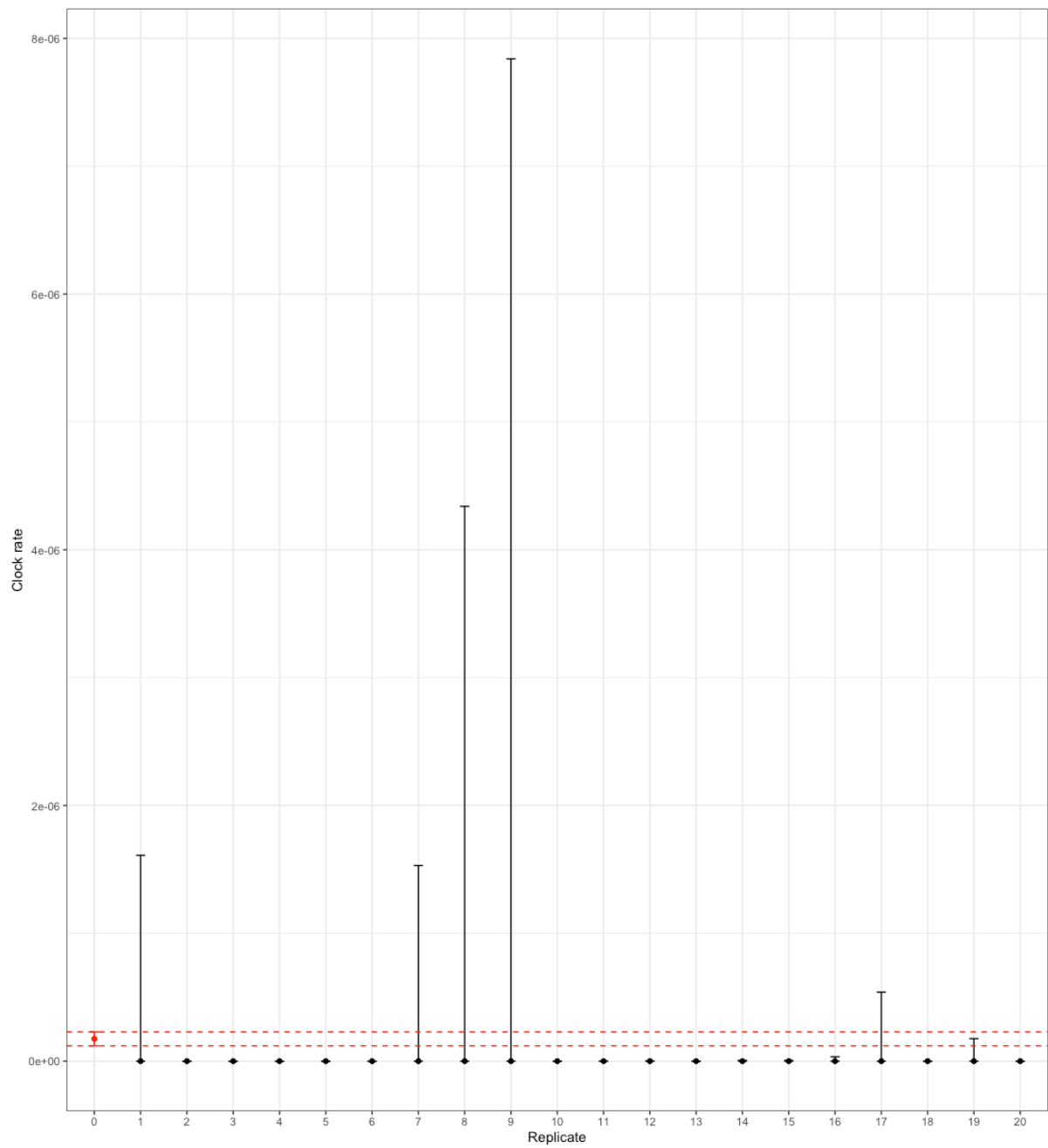


Supplementary Table 1: Model performance based on marginal likelihood estimates (MLE) Bayes factors.

<b>Model</b>	<b>log MLE</b>	<b>log Bayes Factor</b>	<b>Strength of Evidence (Kass &amp; Raftery, 1995)</b>
Relaxed constant	-5604954.493	-	-
Relaxed exponential	-5604956.354	1.861248229	Positive
Strict exponential	-5605103.905	149.4115816	Very strong
Strict constant	-5605106.444	151.9514509	Very strong



Supplementary Figure 1: BEAST dated tip randomization (DTR) analysis. Observed data is highlighted in red.