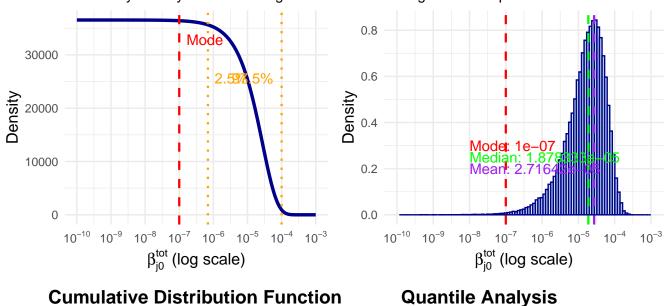
Gompertz Prior for beta\_j0\_tot (Total Base Transmission Rate)

Gompertz Prior for beta\_j0\_tot (Transatissied Risterbution (n = 10000)

Probability density function on log scale Histogram of sampled values



## Probability of transmission rate being less than x Blue = Theoretical, Red = Empirical (from $10^{-4}$ Cumulative Probability Cumulative Probability Cumulative Probability Cumulative Probability Cumulative Probability $3_{ m jo}^{ m tot}$ (log scale) $10^{-5}$ $10^{-6}$ 0.1 $10^{-7}$ 0.0 $10^{-10}$ $10^{-9}$ $10^{-8}$ $10^{-7}$ $10^{-6}$ $10^{-5}$ $10^{-4}$ $10^{-3}$ 30 40 50 60 70 80 $\beta_{i0}^{tot}$ (log scale) Percentile