

Possible marginal survival functions

	Parameters	$h(t)$	$S(t)$	$S^{-1}(U)$
Weibull	$\lambda, \rho > 0$	$\lambda \rho t^{\rho-1}$	$\exp(-\lambda t^\rho)$	$\left(-\frac{\log(U)}{\lambda}\right)^{1/\rho}$
Gompertz	$\lambda, \gamma > 0$	$\lambda \exp(\gamma t)$	$\exp\left\{-\frac{\lambda}{\rho}[\exp(\gamma t) - 1]\right\}$	$\frac{1}{\gamma} \log\left(1 - \frac{\gamma}{\lambda} \log(U)\right)$
logLogistic	$\alpha \in \mathbb{R}, \kappa > 0$	$\frac{\exp(\alpha) \kappa t^{\kappa-1}}{1 + \exp(\alpha) t^\kappa}$	$\frac{1}{1 + \exp(\alpha) t^\kappa}$	$\left(-\frac{1 - 1/U}{\exp(\alpha)}\right)^{1/\kappa}$
logNormal	$\mu \in \mathbb{R}, \sigma > 0$	$\frac{\exp\{-[\log(t) - \mu]^2/2\sigma^2\}}{t\sqrt{2\pi}\sigma\left[1 - \Phi\left(\frac{\log(t) - \mu}{\sigma}\right)\right]}$	$1 - \Phi\left(\frac{\log(t) - \mu}{\sigma}\right)$	$\exp(\mu + \sigma\Phi^{-1}(1 - U))$

with $\Phi(\cdot)$ the cdf of a standard Normal.