Parameter	Scenario	Median $[2.5, 97.5\%\text{ile}]$ bias of estimate ($\log_{10}$)	95% CI coverage
σ_a	No excess variation	$+0.106\ [+0.064, +0.244]$	N/A
	Moderate variation (normal-distributed)	$+0.038\ [-0.017, +0.206]$	98.1%
	Moderate variation (gamma-distributed)	$+0.037\ [-0.017, +0.212]$	97.9%
	Large variation (normal-distributed)	$+0.014\ [-0.194, +0.322]$	97.4%
	Large variation (gamma-distributed)	$+0.035\ [-0.188, +0.406]$	96.0%
σ_b	No excess variation	$+0.132\ [+0.084, +0.283]$	N/A
	Moderate variation (normal-distributed)	$+0.074\ [+0.001, +0.268]$	99.8%
	Moderate variation (gamma-distributed)	$+0.076\ [+0.006, +0.278]$	99.5%
	Large variation (normal-distributed)	$+0.041\ [-0.159, +0.508]$	99.3%
	Large variation (gamma-distributed)	$+0.056\ [-0.152, +0.528]$	99.6%