

**Table S2 Accuracy of kernel ABC under population divergence models with constant size and expansion and bottleneck**

		$N_{anc}$	$N_{IM}$	$N_P$	$T_D^*$	$T_C^*$
Constant size model						
True values		100,000	100,000	100,000	25,000	–
Priors		LN(E=200000, V=200000 <sup>2</sup> )	LN(E=200000, V=200000 <sup>2</sup> )	LN(E=200000, V=200000 <sup>2</sup> )	LN(E=50000, V=50000 <sup>2</sup> )	–
Posterior estimates	Mean	102,064	104,553	98,028	25,602	–
	S.D.	627	4,684	5,059	315	–
Model 1						
True values		100,000	1,000,000	50,000	25,000	–
Priors		LN(E=200000, V=200000 <sup>2</sup> )	LN(E=500000, V=500000 <sup>2</sup> )	LN(E=100000, V=100000 <sup>2</sup> )	LN(E=50000, V=50000 <sup>2</sup> )	–
Posterior estimates	Mean	109,705	970,719	52,136	25,524	–
	S.D.	759	31,078	787	275	–
Model 2 (25%)						
True values		100,000	1,000,000	50,000	25,000	5,000
Priors		LN(E=200000, V=200000 <sup>2</sup> )	LN(E=500000, V=500000 <sup>2</sup> )	LN(E=100000, V=100000 <sup>2</sup> )	LN(E=50000, V=50000 <sup>2</sup> )	LN(E=10000, V=10000 <sup>2</sup> )
Posterior estimates	Mean	94,931	817,480	60,852	29,840	6,972
	S.D.	486	16,354	717	293	176

\* Unit is a generation