Correlation matrices for the estimated HRs were employed to obtain correlated random variables using the Cholesky decomposition, including both the mixed-treatment comparison estimated correlations and the PFS/OS proportions described in *Chapter 4, Hazard ratios*.

Mixed-treatment comparison estimated HRs and CIs relative to PAX were used to derive estimated standard errors for the logarithm of each HR (see *Table 57*).

Randomly sampled estimates of each HR were then computed using the formula:

 $HR_{osa} = exp\{In(mean HR) - Z_{osa} \times (standard error HR)\}$ 

(1)

where  $Z_{psa}$  is sampled from the standard normal distribution.

**TABLE 98** Correlation matrix of HRs relative to PAX used to generate correlated random variables for PSA: population 1

	Measure									
		PFS	PFS	PFS	OS	OS	OS			
Measure	Treatment	VNB	GEM	DOC	VNB	GEM	DOC			
PFS	VNB	1	0.6799	0.6216	0.43	0	0			
PFS	GEM	0.6799	1	0.6174	0	0.48	0			
PFS	DOC	0.6216	0.6174	1	0	0	0.41			
OS	VNB	0.43	0	0	1	0.6479	0.5853			
OS	GEM	0	0.48	0	0.6479	1	0.5313			
OS	DOC	0	0	0.41	0.5853	0.5313	1			

	Measure										
		PFS	PFS	PFS	PFS	os	OS	os	os		
Measure	Treatment	VNB	GEM	DOC	PEM	VNB	GEM	DOC	PEM		
PFS	VNB	1	0.6403	0.5989	0.3273	0.43	0	0	0		
PFS	GEM	0.6403	1	0.5964	0.5176	0	0.48	0	0		
PFS	DOC	0.5989	0.5964	1	0.3043	0	0	0.41	0		
PFS	PEM	0.3273	0.5176	0.3043	1	0	0	0	0.57		
OS	VNB	0.43	0	0	0	1	0.6319	0.5762	0.2855		
OS	GEM	0	0.48	0	0	0.6319	1	0.5212	0.4618		
os	DOC	0	0	0.41	0	0.5762	0.5212	1	0.2369		
OS	PEM	0	0	0	0.57	0.2855	0.4618	0.2369	1		

**TABLE 99** Correlation matrix of HRs relative to PAX used to generate correlated random variables for PSA:population 2