Assessment of working correlation structure

The following working correlation structures offered by SAS/PROC MIXED were used to assess the validity of the original choice (AR(1)).

Structure	Description	Parms	(i,j)th element
AR(1)	Autoregressive(1)	2	$\sigma^2 \rho^{ i-j }$
CS	Compound Symmetry	2	$\sigma_1 + \sigma^2 1(i=j)$
CSH	Heterogeneous CS	<i>t</i> +1	$\sigma_i \sigma_j [\rho 1(i \neq j) + 1(i = j)]$
TOEP	Toeplitz	t	$\sigma_{ i-j +1}$
TOEPH	Heterogeneous TOEP	2 <i>t</i> -1	$\sigma_i \sigma_j \rho_{ i-j }$
UN	Unstructured	<i>t</i> (<i>t</i> +1)/2	σ_{ij}

Correlation structure	Effect of ACEI/ARB use on potassium level	p-value
AR(1)	0.08283	<.0001
CS	0.08120	<.0001
CSH	0.07889	<.0001
TOEP	0.08009	<.0001
ТОЕРН	0.07712	<.0001
UN	0.08422	<.0001

Conclusion: the choice of correlation structure does not affect our main results.