

Supplement Table S3. Model 2a: Results from general linear mixed model testing the association between cell count ratio and different antibiotic dry cow therapy groups in 1,380 cows from 237 dairy farms

Fixed effects	Model 2a output		
	Estimate	SE	<i>P</i> -value <sup>1</sup>
Intercept <sup>a</sup>	-4.853 x 10 <sup>-1</sup>	1.593 x 10 <sup>-1</sup>	0.002
penicillins	-1.693 x 10 <sup>-1</sup>	6.472 x 10 <sup>-2</sup>	0.009
cloxacillin	-2.334 x 10 <sup>-1</sup>	3.882 x 10 <sup>-2</sup>	<0.001
cephalosporins	-3.212 x 10 <sup>-1</sup>	9.738 x 10 <sup>-2</sup>	0.001
rifaximin	-1.105 x 10 <sup>-1</sup>	1.800 x 10 <sup>-1</sup>	0.539
Parity	-3.112 x 10 <sup>-2</sup>	9.907 x 10 <sup>-3</sup>	0.002
sqrt(milk yield before) <sup>b</sup>	3.080 x 10 <sup>-3</sup>	1.778 x 10 <sup>-3</sup>	0.084
Random effects	Variance	SD	
Animal	2.320 x 10 <sup>-1</sup>	4.816 x 10 <sup>-1</sup>	
Herd	1.209 x 10 <sup>-2</sup>	1.100 x 10 <sup>-1</sup>	
residuals	1.563 x 10 <sup>-1</sup>	3.953 x 10 <sup>-1</sup>	

<sup>1</sup>Significance was declared at *P*-values <0.05.

<sup>a</sup>Intercept = cell count ratio was the reference category and calculated using the SCC from the last milk recording data before dry cow therapy and the first SCC after calving.

<sup>b</sup>sqrt(milk yield before) = square root from the milk yield in 305 DIM from the milk recording data before dry cow therapy.