Fixed effects	Model 1a output		
	Estimate	SE	<i>P</i> -value ¹
Intercept ^a	7.444 x 10 ⁻²	5.257 x 10 ⁻³	< 0.001
penicillins	4.733 x 10 ⁻³	5.801 x 10 ⁻³	0.415
cloxacillin	6.921 x 10 ⁻³	3.537 x 10 ⁻³	0.051
cephalosporins	1.420 x 10 ⁻²	8.783 x 10 ⁻³	0.106
rifaximin	2.993 x 10 ⁻²	1.580 x 10 ⁻²	0.058
Parity	-1.279 x 10 ⁻²	8.309 x 10 ⁻⁴	< 0.001
log10(SCCa) ^b	-1.384 x 10 ⁻²	2.599 x 10 ⁻³	< 0.001
Random effects	Variance	SD	
Herd	3.626 x 10 ⁻⁴	1.904 x 10 ⁻²	
residuals	2.709 x 10 ⁻³	5.205 x 10 ⁻²	

Supplement Table S2. Model 1a: Results from general linear mixed model testing the association between milk yield ratio and different antibiotic dry cow therapy groups in 1,380 cows from 237 dairy farms

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

^aIntercept = milk yield ratio was the reference category and calculated using the milk yield in 305 DIM from the milk recording data before and after dry cow therapy.

^blog10(SCCa) = SCC from the first milk recording data after calving.