

Table S1. Information about cows, included in the investigation

Cow No	Breed	Body weight (kg)	Age (years)	Days after parturition	Mean daily milkiness (L)
1	Jersey cattle	450	5	18	14
2	Bulgarian black and white cattle	470	9	7	17
3	Bulgarian black and white cattle	500	9	8	18
4	Jersey cattle	310	3	16	15
5	Bulgarian black and white cattle	490	9	18	21
6	Brown cattle	480	11	17	16

Table S2. Measured concentrations of oxytetracycline in plasma of each cow (n=6) after single intramuscular administration of 20 mg.kg⁻¹ oxytetracycline hydrochloride as long acting drug formulation

Table S3. Measured concentrations oxytetracycline in milk of each cow (n=6) after single intramuscular administration of 20 mg.kg⁻¹ oxytetracycline hydrochloride as long acting drug formulation

Time (h)	Cow 1 ($\mu\text{g.mL}^{-1}$)	Cow 2 ($\mu\text{g.mL}^{-1}$)	Cow 3 ($\mu\text{g.mL}^{-1}$)	Cow 4 ($\mu\text{g.mL}^{-1}$)	Cow 5 ($\mu\text{g.mL}^{-1}$)	Cow 6 ($\mu\text{g.mL}^{-1}$)
0.5	<LOQ	<LOQ	<LOQ	0.02	<LOQ	<LOQ
0.75	0.04	<LOQ	<LOQ	0.04	<LOQ	<LOQ
1	0.05	0.03	0.02	0.27	<LOQ	<LOQ
1.5	0.05	0.04	0.03	0.10	0.12	0.02
2	0.09	0.07	0.05	0.15	0.31	0.05
3	0.39	0.73	0.23	0.29	0.70	0.18
6	1.95	1.90	2.11	2.00	2.29	1.27
9	2.40	3.01	2.48	2.66	3.45	1.85
12	2.81	4.73	3.15	3.80	3.59	2.49
24	2.03	3.46	2.29	1.30	2.67	1.92
48	1.13	1.69	0.85	0.91	1.30	1.44
72	0.56	0.97	0.58	0.56	0.63	0.56
96	0.41	0.52	0.30	0.28	0.34	0.30
120	0.15	0.22	0.22	0.18	0.21	0.20
144	0.08	0.14	0.14	0.12	0.09	0.16
168	0.05	0.10	0.14	0.07	0.08	0.10