

Table S1. Retention time, elemental composition, collision energy, and product ions detected for
40 veterinary drugs

No	Compound	Group ^a	t _R ^b (min)	Elemental composition	Accurate mass	CE	Product ion 1		Product ion 2		IPs ^d
							Elemental composition	Theory mass (m/z)	Elemental composition	Theory mass (m/z)	
1	Clindamycin	Ma	13.4	C ₁₈ H ₃₃ ClN ₂ O ₅ S	424.1799	20	C ₈ H ₁₅ N	126.1277	C ₁₇ H ₂₉ ClN ₂ O ₅	377.1838	6
2	Josamycin	Ma	24.2	C ₄₂ H ₆₉ NO ₁₅	827.4667	35	C ₇ H ₈ O	109.0648	C ₈ H ₁₅ NO ₃	174.1125	12
3	Roxithromycin	Ma	23.5	C ₄₁ H ₇₆ N ₂ O ₁₅	836.5246	20	C ₃₃ H ₆₂ N ₂ O ₁₂	679.4376	C ₈ H ₁₅ NO ₂	158.1176	14
4	Tiamulin	Ma	22.7	C ₂₈ H ₄₇ NO ₄ S	493.3226	15	C ₈ H ₁₇ NO ₂ S	192.1053	A+1 ^c	193.1082	8
5	Tylosin	Ma	22.2	C ₄₆ H ₇₇ NO ₁₇	915.5192	35	C ₈ H ₁₅ NO ₃	174.1125	C ₃₉ H ₆₅ NO ₁₄	772.4478	12
6	Ciprofloxacin	Qu	7.5	C ₁₇ H ₁₈ FN ₃ O ₃	331.1332	20	C ₁₇ H ₁₆ FN ₃ O ₂	314.1299	C ₁₆ H ₁₈ FN ₃ O	288.1507	10
7	Danofloxacin	Qu	8.3	C ₁₉ H ₂₀ FN ₃ O ₃	357.1489	20	C ₁₉ H ₁₈ FN ₃ O ₂	340.1456	A+1	341.1487	6
8	Difloxacin	Qu	10.7	C ₂₁ H ₁₉ F ₂ N ₃ O ₃	399.1395	20	C ₂₁ H ₁₇ F ₂ N ₃ O ₂	382.1362	C ₂₀ H ₁₉ F ₂ N ₃ O	356.1569	10
9	Enoxacin	Qu	6.7	C ₁₅ H ₁₇ FN ₄ O ₃	320.1285	15	C ₁₅ H ₁₅ FN ₄ O ₂	303.1252	A+1	304.1281	6
10	Enrofloxacin	Qu	8.7	C ₁₉ H ₂₂ FN ₃ O ₃	359.1645	20	C ₁₉ H ₂₀ FN ₃ O ₂	342.1612	C ₁₈ H ₂₂ FN ₃ O	316.1820	10
11	Fleroxacin	Qu	7.0	C ₁₇ H ₁₈ F ₃ N ₃ O ₃	369.1300	20	C ₁₆ H ₁₈ F ₃ N ₃ O	326.1475	C ₁₇ H ₁₆ F ₃ N ₃ O ₂	352.1267	12
12	Flumequine	Qu	18.8	C ₁₄ H ₁₂ FNO ₃	261.0801	20	C ₁₄ H ₁₀ FNO ₂	244.0768	C ₁₁ H ₄ FNO ₂	202.0299	6
13	Lomefloxacin	Qu	8.1	C ₁₇ H ₁₉ F ₂ N ₃ O ₃	351.1395	20	C ₁₄ H ₁₄ F ₂ N ₂ O	265.1147	C ₁₇ H ₁₇ F ₂ N ₃ O ₂	334.1362	18
14	Marbofloxacin	Qu	6.6	C ₁₇ H ₁₉ FN ₄ O ₄	362.1390	20	C ₄ H ₆ N	72.0808	C ₁₇ H ₁₇ FN ₄ O ₃	345.1357	12
15	Nalidixic Acid	Qu	17.4	C ₁₂ H ₁₂ N ₂ O ₃	232.0848	10	C ₁₂ H ₁₀ N ₂ O ₂	215.0815	C ₁₀ H ₆ N ₂ O ₂	187.0502	10
16	Norfloxacin	Qu	7.2	C ₁₆ H ₁₈ FN ₃ O ₃	319.1332	15	C ₁₆ H ₁₆ FN ₃ O ₂	302.1299	C ₁₅ H ₁₈ FN ₃ O	276.1507	8
17	Ofloxacin	Qu	7.1	C ₁₈ H ₂₀ FN ₃ O ₄	361.1438	20	C ₁₇ H ₂₀ FN ₃ O ₂	318.1612	C ₁₈ H ₁₈ FN ₃ O ₃	344.1405	12
18	Orbifloxacin	Qu	9.0	C ₁₉ H ₂₀ F ₃ N ₃ O ₃	395.1457	20	C ₁₅ H ₁₃ F ₃ N ₂ O	295.1053	C ₁₈ H ₂₀ F ₃ N ₃ O	352.1631	20
19	Pipemidic acid	Qu	5.4	C ₁₄ H ₁₇ N ₅ O ₃	303.1331	20	C ₁₄ H ₁₅ N ₅ O ₂	286.1299	C ₁₁ H ₁₂ N ₄ O	217.1084	10
20	Sparfloxacin	Qu	10.8	C ₁₉ H ₂₂ F ₂ N ₄ O ₃	392.1660	25	C ₁₅ H ₁₅ F ₂ N ₃ O	292.1256	C ₁₂ H ₁₀ F ₂ N ₃ O	251.0865	32
21	Sulfabenzamide	Su	12.2	C ₁₃ H ₁₂ N ₂ O ₃ S	276.0569	10	C ₆ H ₅ NO ₂ S	156.0114	C ₆ H ₅ NO	108.0444	6
22	Sulfachloropyridazine	Su	8.7	C ₁₀ H ₉ ClN ₄ O ₂ S	284.0135	10	C ₆ H ₅ NO ₂ S	156.0114	C ₆ H ₅ NO	108.0444	10
23	Sulfadiazine	Su	4.0	C ₁₀ H ₁₀ N ₄ O ₂ S	250.0525	15	C ₆ H ₅ NO ₂ S	156.0114	C ₆ H ₅ NO	108.0444	14
24	Sulfadimethoxine	Su	14.1	C ₁₂ H ₁₄ N ₄ O ₄ S	310.0736	20	C ₆ H ₅ NO ₂ S	156.0114	C ₆ H ₉ N ₃ O ₂	156.0768	12
25	Sulfamerazine	Su	5.3	C ₁₁ H ₁₂ N ₄ O ₂ S	264.0681	20	C ₆ H ₅ N	92.0495	C ₆ H ₅ NO	108.0444	14
26	Sulfameter	Su	6.9	C ₁₁ H ₁₂ N ₄ O ₃ S	280.0630	20	C ₆ H ₅ NO ₂ S	156.0114	C ₆ H ₅ NO	108.0444	18
27	Sulfamethazine	Su	7.0	C ₁₂ H ₁₄ N ₄ O ₂ S	278.0838	20	C ₆ H ₇ N ₃ O ₂ S	186.0332	C ₆ H ₉ N ₃	124.0869	14
28	Sulfamethizole	Su	6.9	C ₉ H ₁₀ N ₄ O ₂ S ₂	270.0245	15	C ₆ H ₅ NO ₂ S	156.0114	C ₆ H ₅ NO	108.0444	8
29	Sulfamethoxazole	Su	9.7	C ₁₀ H ₁₁ N ₃ O ₃ S	253.0521	15	C ₆ H ₅ NO ₂ S	156.0114	C ₆ H ₅ N	92.0495	18
30	Sulfamonomethoxine	Su	8.6	C ₁₁ H ₁₂ N ₄ O ₃ S	280.0630	20	C ₆ H ₅ NO	108.0444	C ₆ H ₅ N	92.0495	16
31	Sulfaphenazole	Su	14.4	C ₁₅ H ₁₄ N ₄ O ₂ S	314.0838	25	C ₉ H ₇ N ₃	158.0713	C ₉ H ₉ N ₃	160.0869	14
32	Sulfapyridine	Su	5.0	C ₁₁ H ₁₁ N ₃ O ₂ S	249.0572	20	C ₆ H ₅ N	92.0495	C ₆ H ₅ NO	108.0444	16
33	Sulfaquinoxaline	Su	14.4	C ₁₄ H ₁₂ N ₄ O ₂ S	300.0681	15	C ₆ H ₅ NO ₂ S	156.0114	C ₆ H ₅ NO	108.0444	10
34	Sulfathiazole	Su	4.7	C ₉ H ₉ N ₃ O ₂ S ₂	255.0136	15	C ₆ H ₅ NO ₂ S	156.0114	C ₆ H ₅ NO	108.0444	8
35	Sulfisoxazole	Su	11.0	C ₁₁ H ₁₃ N ₃ O ₃ S	267.0678	15	C ₆ H ₅ NO ₂ S	156.0114	C ₅ H ₈ N ₂ O	113.0709	10
36	Chlortetracycline	Te	11.5	C ₂₂ H ₂₃ ClN ₂ O ₈	478.1143	15	C ₂₂ H ₁₈ ClNO ₇	444.0845	C ₂₂ H ₂₀ ClNO ₈	462.0950	12
37	Demeclocycline	Te	9.1	C ₂₁ H ₂₁ ClN ₂ O ₈	464.0986	15	C ₂₁ H ₁₈ ClNO ₈	448.0794	C ₂₁ H ₁₆ ClNO ₇	430.0688	12
38	Doxycycline	Te	12.5	C ₂₂ H ₂₄ N ₂ O ₈	444.1533	15	C ₂₂ H ₂₁ NO ₈	428.1340	A+1	429.1373	4
39	Oxytetracycline	Te	6.8	C ₂₂ H ₂₄ N ₂ O ₉	461.1558	15	C ₂₂ H ₁₉ NO ₈	426.1183	C ₂₂ H ₂₁ NO ₉	444.1289	8

No	Compound	Group ^a	t _R ^b (min)	Elemental composition	Accurate mass	CE	Product ion 1		Product ion 2		IPs ^d
							Elemental composition	Theory mass (<i>m/z</i>)	Elemental composition	Theory mass (<i>m/z</i>)	
40	Tetracycline	Te	7.6	C ₂₂ H ₂₄ N ₂ O ₈	444.1533	15	C ₂₂ H ₁₉ NO ₇	410.1234	C ₇ H ₇ NO ₃	154.0499	6

^a Group code: quinolones (Qu), sulfonamides (Su), macrolides(Ma) and tetracyclines(Te).

^b t_R: retention time of analyte detected in standard solution.

^c A+1: isotope peak.

^dIPs: identification points were calculated according to EC/2002/657