

ANNEXURE

Table 10.1.1 Individual pharmacokinetic results derived by non-compartmental analysis from goats at 24 °C

Pharmacokinetic variable	Animal No					
	1	2	3	4	5	7
AUClast (ng.min/ml)	1391	2021	1621	2618	2586	1896
AUCinf (ng.min/ml)	1813	2215	1908	3178	3006	1961
AUMCinf (ng.min ² /ml)	68031	35622	47628	99491	82561	27851
MRT (min)	37.5	16.1	25	31.3	27.5	14.2
T _{1/2} lambda (min)	38.9	23.1	25.5	24.5	21.9	13.4
Cav (ng/ml)	23.2	33.7	27.0	43.6	43.1	31.6
Cl (ml/kg/min)	55.2	45.1	52.4	31.5	33.3	51.0
Vss (l/kg)	2.1	0.7	1.3	1.0	0.9	0.7

Table 10.1.2 Individual pharmacokinetic results derived by non-compartmental analysis from goats at 34 °C

Pharmacokinetic variable	Animal					
	1	2	3	4	5	7
AUClast (ng.min/ml)	2970	1021	1116	2168	2193	1842
AUCinf (ng.min/ml)	4384	1325	1450	2262	2572	2233
AUMCinf (ng.min ² /ml)	226876	48192	53927	24074	67051	66627
MRT (min)	51.8	36.4	37.2	10.6	26.1	29.8
T _{1/2} lambda (min)	48.6	39.5	36.5	19.5	22.4	25.7
Cav (ng/ml)	49.5	17.0	18.6	36.1	36.6	30.7
Cl (ml/kg/min)	22.8	75.5	69.0	44.2	38.9	44.8
Vss (l/kg)	1.2	2.7	2.6	0.5	1.0	1.3

Table 10.1.3 Individual pharmacokinetic results derived by non-compartmental analysis from goats at 14 °C

Pharmacokinetic variable	Animal					
	1	2	3	4	5	7
AUClast (ng.min/ml)	885	1095	1138	2050	2083	1805
AUCinf (ng.min/ml)	1096	1338	1423	2445	2244	2128
AUMCinf (ng.min ² /ml)	33841	37790	45982	64992	37235	59081
MRT (min)	30.9	28.2	32.3	26.6	16.6	27.8
T _{1/2} lambda (min)	41.6	37.0	30.6	29.0	18.6	22.4
Cav (ng/ml)	14.8	18.3	19.0	34.2	34.7	30.1
Cl (ml/kg/min)	91.2	74.7	70.3	40.9	44.6	47.0
Vss (l/kg)	2.8	2.1	2.3	1.1	0.7	1.3

Table 10.2.1 Individual pharmacokinetic results derived by compartmental analysis from goats at 24 °C

Pharmacokinetic variable	Animal					
	1	2	3	4	5	7
AUC (ng.min/ml)	1521	2084	-	3131	2951	1925
AUMC (ng.min ² /ml)	31948	12424	-	103722	85828	32024
A (ng/ml)	252.8	1292.6	-	117.1	111.8	210.3
B (ng/ml)	31.0	59.9	-	62.5	68.5	53.0
Cp ⁰ (ng/ml)	283.8	1352.5	-	179.6	180.3	263.3
α (min ⁻¹)	0.4725	1.0210	-	0.1873	0.1968	0.3158
β (min ⁻¹)	0.0317	0.0732	-	0.025	0.0287	0.0421
K10 (min ⁻¹)	01877	0.6489	-	0.0574	0.0611	0.1368
K12 (min ⁻¹)	0.2367	0.3301	-	0.0734	0.0719	0.1239
K21 (min ⁻¹)	0.0798	0.1151	-	0.0815	0.0925	0.0972
K10-HL (min)	3.7	1.1	-	12.1	11.3	5.1
T _{1/2} α (min)	1.5	0.7	-	3.7	3.5	2.2
T _{1/2} β (min)	21.9	9.5	-	27.8	24.1	16.5
Vc (min ⁻¹)	0.35	0.074	-	0.557	0.555	0.38
Cl (ml/kg/min)	66	48	-	32	34	52
MRT (min)	21.1	6.0	-	33.1	29.1	16.6
Vss (l/kg)	1.398	0.286	-	1.058	0.985	0.864

Table 10.2.2 Individual pharmacokinetic results derived by compartmental analysis from goats at 34 °C

Pharmacokinetic variable	Animal					
	1	2	3	4	5	7
AUC (ng.min/ml)	3416	1162	1397	2440	2967	2560
AUMC (ng.min ² /ml)	75424	23535	47500	7917	140700	129383
A (ng/ml)	1075.4	422	292.3	1664.4	234.2	189.0
B (ng/ml)	61.4	19.3	19.3	173.6	26.1	24.4
Cp ⁰ (ng/ml)	1136.8	441.3	311.6	1838.0	260.3	213.4
α (min ⁻¹)	0.8368	0.8494	0.6568	1.2315	0.2160	0.2345
β (min ⁻¹)	0.0288	0.0290	0.0203	0.1595	0.0139	0.0139
K10 (min ⁻¹)	0.3328	0.3798	0.2232	0.7534	0.0878	0.0834
K12 (min ⁻¹)	0.4603	0.4338	0.3942	0.3768	0.1080	0.1259
K21 (min ⁻¹)	0.0725	0.0648	0.0598	0.2608	0.0342	0.0392
K10-HL (min)	2.1	1.8	3.1	0.9	7.9	8.3
T½α (min)	0.8	0.8	1.1	0.6	3.2	3
T½β (min)	24.0	23.9	34.1	4.3	50.0	49.8
Vc (min ⁻¹)	0.088	0.227	0.321	0.054	0.384	0.469
Cl (ml/kg/min)	29	86	72	41	34	39
MRT (min)	22.1	20.3	34.0	3.2	47.4	50.5
Vss (l/kg)	0.646	1.74	2.44	0.133	1.599	1.974

Table 10.2.3 Individual pharmacokinetic results derived by compartmental analysis from goats at 14 °C

Pharmacokinetic variable	Animal					
	1	2	3	4	5	7
AUC (ng.min/ml)	1023	2053	1456	2347	2143	2976
AUMC (ng.min ² /ml)	13399	3276	54484	61029	34472	232941
A (ng/ml)	669.5	3037.7	230.8	504.3	394.1	174.5
B (ng/ml)	14.2	97.0	17.7	29.5	47.9	19.7
Cp ⁰ (ng/ml)	683.7	3134.7	248.5	533.8	442.0	194.2
α (min ⁻¹)	1.1238	1.9439	0.4792	0.4904	0.4400	0.2045
β (min ⁻¹)	0.0332	0.1981	0.0820	0.0224	0.03844	0.0093
K10 (min ⁻¹)	0.6682	1.5273	0.1707	0.2274	0.2063	0.0652
K12 (min ⁻¹)	0.4330	0.3626	0.2755	0.2371	0.1901	0.1194
K21 (min ⁻¹)	0.0559	0.2522	0.0511	0.0483	0.082	0.0290
K10-HL (min)	1.0	0.5	4.1	3.0	3.4	10.6
T½α (min)	0.6	0.4	1.4	1.4	1.6	3.4
T½β (min)	20.9	3.5	38.1	31.0	18.0	74.7
Vc (min ⁻¹)	0.146	0.032	0.4	0.187	0.226	0.515
Cl (ml/kg/min)	98	49	69	43	47	34
MRT (min)	13.1	1.6	37.4	26.0	16.1	78.3
Vss (l/kg)	1.28	0.078	2.57	1.108	0.751	2.63

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