

Compounds in Training set	% dose excreted into bile	Administration Route	Collection period	Analytical Method	Molecular Weight	Charge Status	Substrate of Efflux transporters	Reference
Bile acids:								
chenodeoxycholate (CDC)	0.3 ± 0.21	infusion	20 min	Radioactive	392.58	anion		Takikawa H,et.al. Hepatology. 1991 Aug;14(2):352-60. Male SDRs weighing about 270g. % of dose (in total): ~ 3% at steady state. Parent drug accounted for 6 -10% of that.
lithocholate (LC)	0.98 ± 0.98	i.v.	60 min	Radioactive	376.58	anion	Mrp2	Takikawa H,et.al. Hepatology. 1991 Aug;14(2):352-60. Male SDRs weighing about 270g. % of dose (in total): 98% ± 1.6%. Parent drug accounted for 1% ± 1% of that.
taurocholate	91 ± 12	i.v.	60 min	Radioactive	515.71	anion	Bsep	Akashi M, et.al. Hepatol Res. 2006 Feb 11,193-198
	92 ± 2	i.v.	90 min	Radioactive				Male Sprague-Dawley rats weighting approximately 270g
	100.8 ± 7.0	i.v.	50 min	Radioactive				Takikawa H, et.al. Hepatology. 1996 Mar;23(3):607-13.
	90 ~ 95	i.v.	60 min	Radioactive				Male Sprague-Dawley rats (SDR) approximately 270g
	97.2 ± 2.6	i.v.	90 min	Radioactive				Fukumura S, et.al. Pharm Res. 1998 Jan;15(1):72-6
	91 ± 5	i.v.	1 hr	Radioactive				Male Sprague-Dawley rats (SDR) approximately 270g
	95	i.v.	60 min	Radioactive				Kuipers F, et.al. J Clin Invest. 1988 May;81(5):1593-9
	98	i.v.	30 min	Radioactive				Wistar rats.
	87.2	infusion	60 min					Jansen PL, et.al. Hepatology. 1987 Jan-Feb;7(1):71-6.
								Homozygous TM rats (200 to 250g)
								Bowmer CJ, et.al. Br J Pharmacol. 1984 Nov;83(3):773-82
								Male Wistar albino rats (250-350g)
								Bode KA, et.al. Biochem Pharmacol. 2002 Jul 1;64(1):151-8
								Male Wistar rats weighing about 180 - 220g.
								Meijer DK, et.al. Drug Metab Dispos. 1976 Jan-Feb;4(1):1-7.
								Male Wistar rats weighing about 275g.
Statins:								
fluvastatin	13 - 26	i.v.	6 hr	HPLC	411.5	anion	Mrp2	Lindahl A, et.al. Mol Pharm. 2004 Sep-Oct;1(5):347-56
								Male Sprague-Dawley rats (305 ± 20g)
pitavastatin	72.7 ± 2.1	infusion	210 min	Radioactive	421.5	anion		Hirano M, et.al. Mol Pharmacol. 2005 Sep;68(3):800-7
	57.59 ± 5.6	i.v.	6 hr	Radioactive/HPLC				Male Sprague-Dawley rats weighing approximately 250 to 300g
								Fujino H, et.al. Drug Metab Pharmacinet. 2002;17(5):449-56
								Male Sprague-Dawley rats weighing approximately 250g
pravastatin	83 ± 11	i.v.	60 min	Radioactive	424.53	anion	Mrp2	Akashi M, et.al. Hepatol Res. 2006 Feb 11,193-198
	79.7 ± 7.0	i.v.	50 min	Radioactive				Male Sprague-Dawley rats weighting approximately 270g
	78 ± 1	i.v.	90 min	Radioactive				Fukumura S, et.al. Pharm Res. 1998 Jan;15(1):72-6
	78.1 ± 14.5	infusion	120 min	Radioactive				Male Sprague-Dawley rats (SDR) approximately 270g
	85	infusion	100 min	Radioactive				Marumo T, et.al. J Gastroenterol. 2004 Oct;39(10):981-7.
	82 ± 5.1	i.v.	60 min	Radioactive				Male Sprague-Dawley rats weighting approximately 270g
	82.8 ± 6.3	i.v.	60 min	Radioactive				Sasaki M, et.al. Mol Pharmacol. 2004 Sep;66(3):450-9
								male Sprague-Dawley rats weighing approximately 240 to 260g
								Takikawa H, et.al. J Gastroenterol Hepatol. 1998 Apr;13(4):427-32
				Male Sprague-Dawley rats weighting approximately 270g				
								Ohashi M, et.al. Pharmacology. 2002 Sep;66(1):31-5
								Ogasawara T, et.al. Hepatol Res. 2001 Jun;20(2):221-231
								Male Sprague-Dawley rats weighing approximately 270g
Dyes:								
bromochlorophenol blue	89 (85 - 93)	i.v.	3 hr	Spectrometry	581	anion		Hirrom PC, et.al. Biochem J. 1972 Oct;129(5):1071-7.
								Female Wistar albino rats (180-350g body wt.)
bromocresol green	73 (72 - 74)	i.v.	3 hr	Spectrometry	698	anion		Hirrom PC, et.al. Biochem J. 1972 Oct;129(5):1071-7.
								Female Wistar albino rats (180-350g body wt.)

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bromophenol blue	69 (65 - 71)	i.v.	3 hr	Spectrometry	670	anion		Hiron PC, et.al. Biochem J. 1972 Oct;129(5):1071-7. Female Wistar albino rats (180-350g body wt.) Wills RJ, et.al. J Pharm Sci. 1983 Oct;72(10):1127-31 Fasted male Sprague-Dawley rats (260 - 470g)
	80	i.v. infusion	5 hr 2 hr	Spectrometry				
dibromosulfophthalein (DBSP)	87 ± 3	infusion	30 min	Spectrophotometry	636.2	anion	Mrp2	Jansen PL et.al. Am J Physiol. 1993 Sep;265(3 Pt 1):G445-52 Male Wistar rats, weighing 250-300g Jansen PL, et.al. Hepatology. 1987 Jan-Feb;7(1):71-6. Homozygous TM rats (200 to 250g)
	81.8 ± 1.8	i.v.	60 min	Spectrophotometry				
indocyanine green (ICG)	30 ± 2	infusion	30 min	Spectrophotometry	755.01	anion	Mrp2	Jansen PL et.al. Am J Physiol. 1993 Sep;265(3 Pt 1):G445-52 Male Wistar rats, weighing 250-300g Kurisu H, et.al. Life Sci. 1991;49(14):1003-11 Sprague-Dawley Rat Verkade HJ, et.al. Gastroenterology. 1990 Nov;99(5):1485-92. Normal Wistar rats weighting 280-320 g Sathirakul K, et.al. J Pharmacol Exp Ther. 1993 Jun;265(3):1301-12 Male SD rats weighing approximately 280 g Takikawa H, et.al. J Gastroenterol Hepatol. 1998 Apr;13(4):427-32 Male Sprague-Dawley rats weighting approximately 270g Hiron PC, et.al. Biochem J. 1972 Oct;129(5):1071-7. Female Wistar albino rats (180-350g body wt.) Tachizawa H, et.al. J Gastroenterol Hepatol. 2004 Sep;19(9):1016-22 Male Spraguc-Dawley rats 270g. Kimura T, et.al. Biol Pharm Bull. 1993 Nov;16(11):1140-5 Male Wistar rats weighing 200-300g Chan PK, et.al. J Toxicol Environ Health. 1981 Feb;7(2):169-79
	63	i.v.	90 min	HPLC				
	40.3 ± 2.4	i.v.	60 min	Spectrophotometry				
	72	i.v.	4 hr	Spectrophotometry				
	47.7	i.v.	2 hr	Spectrophotometry				
	82 (70 -96)	i.v.	3 hr	Spectrophotometry				
	50	infusion	2 hr	Radioactive				
	76.1 ± 3.9	i.v.	4 hr	Spectrophotometry				
50.7	i.v.	15 min	Spectrometry					
lissamine fast yellow	90 (Female) 80 (Male)	i.v.	3 hr		507.32	anion		Bertagni P, et.al. J Pharm Pharmacol. 1972 Aug;24(8):620-4 Male and female Wistar albino rats (190-350 g).
phenolsulfonephthalein (PSP, phenol red)	14.1 ± 1.1	i.v.	60 min	HPLC-UV/VIS	354.38	anion	Mrp2	Itagaki S, et.al. Drug Metab Pharmacinet. 2003;18(4):238-44 Male SD rats (300 -350g). Amount excreted into bile in 1 hr: 311 ± 23.4 nmol/kg. Dose: 2.2 µmol/kg.
rhodamine 123	3.72	i.v.	2 hr	Spectrophotometry	344.37	cation	P-gp	Kageyama M, et.al. Biol Pharm Bull. 2006 Apr;29(4):779-84 Male Wistar Rats, 300 ± 20g. Amount excreted into bile over 2 hr: 2.23 ± 0.06 µg. Dose: 0.2 mg/kg. Kageyama M, et.al. Biol Pharm Bull. 2005 Feb;28(2):316-22 Male Wistar rats: 280 -320g. Amount excreted into bile: 2.79 ± 0.37 µg. Dose: 0.2 mg/kg. Yumoto R, et.al. Drug Metab Dispos. 2001 Feb;29(2):145-51 Male Wistar rats weighing 230 to 300g. Kageyama M, et.al. Biol Pharm Bull. 2005 Jan;28(1):130-7 Male Wistar: 300 ± 20g. Amount excreted into bile over 2 hr: ~ 2000ng. Dose: 0.2 mg/kg.
	4.65	i.v.	100 min	Spectrophotometry				
	4.3	infusion	40 min	HPLC				
	3.33	i.v.	120 min	Fluorescence				
tartrazine	6.95, 17 (Male) 27.5, 39 (Female)	i.v.	3 hr	TLC	468.4	anion		Gregson RH, et.al. J Pharm Pharmacol. 1972 Jan;24(1):20-4 Male and female Wistar albino rats, 190-210g Bertagni P, et.al. J Pharm Pharmacol. 1972 Aug;24(8):620-4
	13 (Male) 29 (Female)	i.v.	3 hr	TLC				
Penicillins & Cephalosporines: penicillin G (benzylpenicillin)	25.7 ± 3.6	i.v.	24 hr	Spectrofluorometry	334.39	anion	Mrp2	Tsuji A, et.al. J Pharm Sci. 1983 Nov;72(11):1239-52. Male Wistar rats (240g).
	15.85	i.v.	60 min	Radioactive				Ito K, et.al. Am J Physiol Gastrointest Liver Physiol. 2004 Jul;287(1):G42-9 Male SD rats weighing 240–300g. % of dose (in total): 31.7; Parent drug accounted for 50% of that.

Compounds in Training set	% dose excreted into bile	Administration Route	Collection period	Analytical Method	Molecular Weight	Charge Status	Substrate of Efflux transporters	Reference
cefamandole	33	i.v.		Bioassay	462.48	anion		Wright WE, et.al. Antimicrob Agents Chemother. 1980 May;17(5):842-6 Male Wistar rats, weighing 350 to 500g
cefazolin	30	i.v.	6 hr	radioactive	454.5	anion		Tsuji A, et.al. J Pharm Sci. 1983 Nov;72(11):1239-52. Male Wistar rats (240g).
cefbuperazone (T-1982)	80	i.v.			627.65	anion	Mrp2	Saikawa I, et.al. Jpn J Antibiot. 1982 Sep;35(9):2163-73
cefixime	40.8	infusion	3 hr	HPLC	453.45	anion		Yasui H, et.al. J Pharm Sci. 1994 Jun;83(6):819-23 Male Wistar rats (177 - 230g).
cefmenoxime (SCE-1365)	28.5 ± 2.0	i.v.	24 hr	Radioactive Bioassay/TLC	511.6	anion		Tanayama S, et.al. Antimicrob Agents Chemother. 1980 Oct;18(4):511-8 male or female Sprague-Dawley rats weighing 220 to 515g.
cefmetazole	36.25	i.v.	~120 min	HPLC	471.53	anion		Eur J Drug Metab Pharmacinet. 1992 Jul-Sep;17(3):167-73 Male Wistar: 232-298g.
cefoperazone	85.6	i.v.			645.65	anion	Mrp2	Saikawa I, et.al. Jpn J Antibiot. 1980 Oct;33(10):1084-96
cefotetan (YM-09330)	48	i.v.	24 hr	Bioassay	575.61	anion		Komiya M, et.al. Antimicrob Agents Chemother. 1981 Aug;20(2):176-83. SD rats: 200 - 350g.
	56.8	i.v.						Mizojiri K, et.al. Antimicrob Agents Chemother. 1987 Aug;31(8):1169-76
cefpiramide (SM-1652)	59.6 ± 16.5	i.v.	24 hr	Bioassay	612.64	anion	Mrp2	Matsui H, et.al. Antimicrob Agents Chemother. 1982 Aug;22(2):213-7. Male Sprague-Dawley rats (200 to 250 g)
	62	i.v.	24 hr	Bioassay				Imasaki H, et.al. Antimicrob Agents Chemother. 1983 Jul;24(1):42-7 Sprague-Dawley male rats weighting 150 to 300g.
	57.8 ± 4.6	i.v.	2 hr	HPLC				Muraoka I, et.al. Antimicrob Agents Chemother. 1995 Jan;39(1):70-4 20-week-old healthy SDR (weight, 494 to 540 g)
cephalexin	2.25	i.v.		Bioassay	347.39	zwitter		Wright WE, et.al. Antimicrob Agents Chemother. 1980 May;17(5):842-6. Male Wistar rats, weighing 350 to 500g
flomoxef	21.2 ± 0.1 15.9 ± 0.1	i.v.	8 hr	HPLC	496.5	anion	Mrp2	Hishikawa S, et.al. Chronobiol Int. 2003 May;20(3):463-71 Male Wistar rats weighing 250–300 g.
moxalactam (latamoxef)	20.6 ± 0.79 14.6 ± 0.59 24.5 ± 1.6	i.v. i.v.	2.5 hr 24 hr	HPLC Radioactive	520.48	anion		Uchida K, et.al. J Pharmacobiodyn. 1985 Nov;8(11):981-8 Wistar strain male rats, 8 weeks of age Mizojiri K, et.al. Antimicrob Agents Chemother. 1987 Aug;31(8):1169-76 Male Sprague-Dawley rats (weight, 250 to 320 g)
Quinolone Antibiotics:								
ciprofloxacin	9.92	i.v.	60 min	HPLC	331.35	zwitter		Yamaguchi H, et.al. Pharm Res. 2004 Feb;21(2):330-8. Male Wistar rats weighing 200–250g
grepafloxacin	3.8	i.v.	3 hr	Radioactive/TLC	359.4	zwitter	Mrp2, P-gp	Sasabe H, et.al. J Pharmacol Exp Ther. 1998 Mar;284(3):1033-9. Male Sprague-Dawley rats weighing approximately 250 to 300g.
	4.43 (R-) 3.66 (S-)	infusion	160 min	HPLC				Sasabe H, et.al. J Pharmacol Exp Ther. 1998 Feb;284(2):661-8 Male Sprague-Dawley (SD) weighing approximately 250 to 300g
	5.19	i.v.	60 min	HPLC				Yamaguchi H, et. al. J Pharmacol Exp Ther. 2002 Mar;300(3):1063-9 Male Wistar rats, 200-240g.
	9.82	i.v.	60 min	HPLC				Yamaguchi H, et.al. Pharm Res. 2004 Feb;21(2):330-8. Male Wistar rats weighing 200–250g

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	6.56	infusion	160 min	HPLC				Sasabe H, et.al. Biopharm Drug Dispos. 1999 Apr;20(3):151-8 Male SD rats weighing approximately 250–300g
levofloxacin	10.1	i.v.	60 min	HPLC	361.4	zwitter	P-gp	Yamaguchi H, et. al. J Pharmacol Exp Ther. 2002 Mar;300(3):1063-9 Male Wistar rats, 200-240g.
	7.98	i.v.	60 min	HPLC				Yamaguchi H, et.al. Pharm Res. 2004 Feb;21(2):330-8. Male Wistar rats weighing 200–250g
lomefloxacin	4.26	infusion	160 min	HPLC	351.36	zwitter	Mrp2	Sasabe H, et.al. Biopharm Drug Dispos. 1999 Apr;20(3):151-8 Male SD rats weighing approximately 250–300g
pefloxacin	3.94 + 0.18	i.v.	8 hr	Bioassay/HPLC	333.4	zwitter		Montay G, et.al. Antimicrob Agents Chemother. 1984 Apr;25(4):463-72 Male Wistar rats (200 to 300g)
ulifloxacin (UFX)	9.1 ± 2.0	i.v.	8-24 hr	HPLC	349.38	zwitter	P-gp	Yagi Y, et.al. Drug Metab Pharmacokinet. 2003;18(6):381-9 Male SD rats aged 7 weeks.
Macrolide Antibiotics:								
actinomycin D	31	i.v.	4 hr	Radioactive	1255.45	neutral	P-gp	Wosilait WD, et.al. Life Sci I. 1971 Sep 15;10(18):1051-5 Male Sprague-Dawley rats, weighing about 300 g.
azithromycin	9.6 (Wistar) 1.2 (SD)	infusion i.v.	60 min 120 min	HPLC HPLC	749	cation	Mrp2, P-gp	Sugie M, et.al. Antimicrob Agents Chemother. 2004 Mar;48(3):809-14 Male Wistar Rats, 260 - 270g. Male Sprague-Dawley rats (normal rats) (260 to 280g)
erythromycin	34 ± 10	i.v.	60 min	Radioactive	734	cation	Mrp2, P-gp	Akashi M, et.al. Hepatol Res. 2006 Feb 11,193-198 Male Sprague-Dawley rats weighting approximately 270g
	22.2	i.v.	100 min	LC/MS				Kageyama M, et.al. Biol Pharm Bull. 2005 Feb;28(2):316-22 Male Wistar rats (280 to 320g). Amount excreted into bile: 200.3 ± 35.6 µg. Dose: 3 mg/kg.
	32.1 ± 8.3	i.v.	60 min	Radioactive				Sato A, et.al. Pharmacology. 1999 Nov;59(5):249-56
	33	infusion	90 min	Radioactive				Tachizawa H, et.al. J Gastroenterol Hepatol. 2004 Sep;19(9):1016-22 Male Sprague-Dawley rats 270g.
	29.7	i.v.	4 hr	HPLC				Lam JL, et.al. Drug Metab Dispos. 2006 Aug;34(8):1336-44. Male Wistar rats (200 - 350g). CLtot: 47.2 ± 12.5 and 42.1 ± 5.7 ml/min/kg. CLbiliary: 15.5 ± 2.9 and 11.2 ± 2.0 ml/min/kg.
telithromycin	13.8	infusion	60 min	HPLC	812	cation	Mrp2, P-gp	Yamaguchi S, et.al. Antimicrob Agents Chemother. 2006 Jan;50(1):80-7 Male SD rats, 270-280g. CLsys: 6.97 ± 0.22 L/hr/kg. CLbiliary: 4.41 ± 0.21 ml/min.
Other antibiotics:								
fosmidomycin	0.1	i.v.	24 hr	Bioassay	183.1	anion		Murakawa T, et.al. Antimicrob Agents Chemother. 1982 Feb;21(2):224-30.
NSAIDs:								
acetaminophen (paracetamol)	1	i.v.	3 hr	HPLC	151	neutral	Mrp2	Ghanem CI, et.al. J Pharmacol Exp Ther. 2005 Dec;315(3):987-95 Male Wistar rats (250–290 g)
	0.6	i.v.	5 hr	HPLC				Savina PM, et.al. Drug Metab Dispos. 1992 Jul-Aug;20(4):496-501. Male Sprague-Dawley rats (266-282 g).
diclofenac	1.28	i.v.	180 min	HPLC	296	anion		Peris-Ribera JE, et.al. J Pharmacinet Biopharm. 1991 Dec;19(6):647-65. Male Wistar rats (320-380 g). % of Dose (in total): 27.2; Parent drug accounted for 4.7% of that.
indomethacin	2.06	infusion	2 hr	Radioactive	357.8	anion		Kouzuki H, et.al. Pharm Res. 2000 Apr;17(4):432-8 SD rats of 302–368 g body weight.

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Thrombin inhibitors:								
NAPAP	17.2 ± 2.4 47.1 ± 1.6 54.2 ± 20.1 46.3 ± 10.7 28.4 ± 9.1 16 53.0 ± 16.0 41	i.v. infusion infusion i.v.	2 hr 2 hr 4 hr 4 hr	Bioassay/HPLC Bioassay	521.64	cation		Hauptmann J, et.al. Biomed Biochim Acta. 1987;46(6):445-53 Wistar Rats of both sexes, body weight 260-340g. Hauptmann J, et.al. Pharmazie. 1991 Jan;46(1):57-8
napsagatran	61 ± 13	i.v.	2 hr	HPLC	558.66	zwitter		Lavé T, et.al. J Pharm Pharmacol. 1999 Jan;51(1):85-91 Male rats (230 ± 290 g), SPF, RoRo albino;
ramatroban	16	i.v.	5 hr	HPLC	416.5	anion	Mrp2	Moriwaki T, et.al. Pharm Res. 2004 Jun;21(6):1055-64 SDR weighing 200–220g. % of dose (in total): 28.5 ± 2.6, Parent drug accounted for 56% of that.
Analgesic:								
buprenorphine	1.39 (Male) 0.76 (Female)	i.v.	24 hr	Radioactive	467.64	cation	P-gp	Brewster D, et.al. Xenobiotica. 1981 Mar;11(3):189-96. Adult SD rats (200-300g). % of Dose (in total): 92.9 + 8.0. Parent drug accounted for 1.5 ± 0.8% of that (Male) % of Dose (in total): 94.5 ± 2.8, Parent drug accounted for 0.8 ± 0.4% of that. (female).
EDDP	36	i.v.	4 hr	GC/MS	279.43	cation		Baselt RC, et.al. Biochem Pharmacol. 1973 Dec 1;22(23):3117-20 Sprague-Dawley male rats (200 - 300 g).
floctafenin	8.9 ± 0.7	i.v.	6 hr	Radioactive	406.36	neutral		Pottier J, et.al. Drug Metab Dispos. 1975 May-Jun;3(3):133-47 Wistar of Sprague-Dawley rats (200 g).
morphine	10 10.71 6.4	i.v. i.v. i.v.	90 min 6.5 hr 3 hr	Radioactive Radioactive Radioactive	285	cation	P-gp	Roerig DL, et.al. Biochem Pharmacol. 1974 Apr 15;23(8):1331-9 Sprague-Dawley male rats (300 - 400g). % of dose (in total): 49.3 ± 3.6. Peterson RE, et.al. J Pharmacol Exp Ther. 1973 Feb;184(2):409-18. Male SD rats (325-450 g). % of dose (in total): 63. Parent drug accounted for 17.0 ± 2.3% of that. Smith DS, et.al. Biochem Pharmacol. 1973 Feb 15;22(4):485-92 Male SD rats (350-450 g). % of dose (in total): 64 ± 5. Parent drug accounted for 10% of that.
Anti-cancer Drugs:								
Camptothecin:								
camptothecin (lactone form)	7.5 ± 4.2	i.v.	240 min	HPLC	348.35	neutral	P-gp	Scott DO, et.al. Drug Metab Dispos. 1994 May-Jun;22(3):438-42 Male Sprague-Dawley rats weighing between 250-300g.
camptothecin (carboxylate form)	26.4 ± 8.9	i.v.	240 min	HPLC	366.38	anion	Mrp2	Scott DO, et.al. Drug Metab Dispos. 1994 May-Jun;22(3):438-42 Male Sprague-Dawley rats weighing between 250-300g.
	46.4 ± 4.6	i.v.	30 min	TLC				Guarino AM, et.al. Cancer Chemother Rep. 1973 Apr;57(2):125-40 Male Sprague-Dawley rats (240 - 320g)
irinotecan (CPT-11) (lactone form)	12.5 7.125 7	i.v. i.v.	8 hr 4 hr	HPLC HPLC	586.69	cation	P-gp	Chu XY, et.al. J Pharmacol Exp Ther. 1997 Apr;281(1):304-14 Male SD rats weighing 250 to 300g. Arimori K, et.al. Pharm Res. 2003 Jun;20(6):910-7 Male Wistar rats from 280 to 340g.
	2.6	i.v.	3 hr	HPLC				Itoh T, et.al. J Pharm Pharm Sci. 2004 Jan 23;7(1):13-8. Male Wistar rats, aged 6 to 7 weeks (180-230 g)
	40.4 ± 6.63	i.v.	3 hr	HPLC	604.71	zwitter		Itoh T, et.al. J Pharm Pharm Sci. 2004 Jan 23;7(1):13-8. Male Wistar rats, aged 6 to 7 weeks (180-230 g)

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Doxorubicin: daunorubicin	11.76	i.v.	24 hr	Fluorescence/TLC	527.5	cation	P-gp	Yesair DW, et.al. Cancer Res. 1972 Jun;32(6):1177-83 Male Sprague-Dawley rats (350 to 500 g). Amount excreted into bile: ~ 500µg. Dose: 10 mg/kg.
doxorubicin	11.45 ± 1.8	i.v.	10 hr	Radioactive/HPLC	543.5	cation	Mrp2, P-gp	Vaidyanathan S, et.al. Cancer Chemother Pharmacol. 2000;46(3):185-92 Female Sprague-Dawley rats weighing 225 to 250g.
	17	i.v.	24/48 hr	HPLC				Krishna R, et.al. Clin Cancer Res. 1999 Oct;5(10):2939-47 Male SD rats, 225-275g.
	28.6	i.v.	30 hr	Fluorometric/TLC				Broggini M, et.al. Cancer Treat Rep. 1980 Aug-Sep;64(8-9):897-904 CD-COBS male rats (body weight, 200 ± 20 g)
	16	i.v.	24 hr	Fluorometric/HPLC				Israel M, et.al. Cancer Res. 1978 Feb;38(2):365-70. Male SD rats weighing 320 to 440 g. % of Dose (in total): 20; Parent drug accounted for 80% of that.
epirubicin (4'-epiDOX)	20	i.v.	30 hr	Fluorometric/TLC	543.53	cation	Mrp2, P-gp	Broggini M, et.al. Cancer Treat Rep. 1980 Aug-Sep;64(8-9):897-904 CD-COBS male rats (body weight, 200 ± 20 g)
iododoxorubicin (IODOX)	2	i.v.	8 hr	Radioactive	653.43	cation		Edwards DM, et.al. Drug Metab Dispos. 1991 Sep-Oct;19(5):938-45 Male SD rats (mean weight 201 ± 6g). % of Dose (in total): 34; parent drug accounted for < 6% of that.
Folate: methotrexate	72	i.v.	150 min	HPLC	454	anion	Mrp2	Masuda M, et.al. Cancer Res. 1997 Aug 15;57(16):3506-10 Male SDRs (250 - 300g).
	84.3	infusion	120 min	Radioactive				Sasaki M, et.al. Mol Pharmacol. 2004 Sep;66(3):450-9 Male SD rats, 240-260g. CLtot: 12.7 ± 1.9 ml/min/kg; CLbiliary: 10.7± 1.7 ml/min/kg.
	58.09 ± 12.61	infusion	120 min	LC/MS				Chen C, et.al. Pharm Res. 2003 Jan;20(1):31-7. Male Sprague-Dawley rats, 15 weeks of age (385 – 550g)
	38.43 ± 4	i.v.	2 hr					Griffin D, et.al. Cancer Chemother Pharmacol. 1987;19(1):40-1
	64	infusion	3 hr	Radioactive				Ueda K, et.al. J Pharmacol Exp Ther. 2001 Jun;297(3):1036-43 Male Sprague-Dawley rats weighing 250 to 300 g.
	50 ± 14.8	i.v.	10 hr	HPLC				Bremnes RM, et.al. Cancer Res. 1989 May 1;49(9):2460-4 Male Wistar rats weighing 220-300 g
	47.8 ± 4 55.6 ± 2	infusion	2 hr	Bioassay Chromatography				Steinberg SE, et.al. Cancer Res. 1982 Apr;42(4):1279-82. Female Sprague-Dawley rats weighing 175 to 250 g
MX-68	84 ± 11.9	infusion	3 hr	Radioactive	512.55	anion	Mrp2	Han YH, et.al. J Pharmacol Exp Ther. 1999 Oct;291(1):204-12. Male Sprague-Dawley rats (SDRs) weighing 250 to 300g.
Other chemotherapeutic agents: colchicine	27.56	i.v.	2 hr	Radioactive	399.44	neutral	P-gp	Hunter AL, et.al. J Pharmacol Exp Ther. 1975 Mar;192(3):605-17. Male Thorp SD rats (350-390g). % of dose (in total): 52. Parent drug accounted for 53% of that.
	22	infusion	135 min	HPLC				Speeg KV, et.al. Cancer Chemother Pharmacol. 1994;34(2):133-6 Male Sprague-Dawley rats weighing 300-400g
	27	i.v.	40 min	HPLC				Speeg KV, et.al. Hepatology. 1992 May;15(5):899-903. Male SD rats weighing 300 to 400g. CLsys: 43.05 ± 2.68 ml/min/kg. CLbiliary: 11.62 ± 0.84 ml/min/kg.
	24.9	i.v.	2 hr	Radioactive				Kitani K, et.al. Tohu J Exp Med. 1981 Apr;133(4):389-97. Male Wistar rats (300g on the average). % of dose (in total): 35.19 ± 2.91. Parent drug accounted for 70.82 ± 7.79% of that.
17-AAG	2.0 ± 0.5	i.v.	4 hr	HPLC	585.69	neutral	P-gp	Musser SM, et.al. Cancer Chemother Pharmacol. 2003 Aug;52(2):139-46. Male Fischer 344 rats (7–8 weeks of age and weighing 220–234g)
paclitaxel (taxol)	12 ± 2	i.v.	24 hr	HPLC	854	neutral	Mrp2, P-gp	Monsarrat B, et.al. J Natl Cancer Inst Monogr. 1993;(15):39-46. Sprague-Dawley rats.
	11.5	i.v.	24 hr	HPLC				Monsarrat B, et.al. Drug Metab Dispos. 1990 Nov-Dec;18(6):895-901

Compounds in Training set	% dose excreted into bile	Administration Route	Collection period	Analytical Method	Molecular Weight	Charge Status	Substrate of Efflux transporters	Reference
vincristine (VCR)	42.6 ± 5.8	i.v.	2 hr	Radioactive/HPLC	825	cation	Mrp2, P-gp	Song S, et.al. Drug Metab Dispos. 1999 Jun;27(6):689-94 Female Sprague-Dawley (SD) rats weighing 220 to 270g.
	24.3; 35 (Male) 17.4; 26.9 (Female)	i.v.	4 hr	Radioactive/TLC				Castle MC, et.al. Cancer Res. 1976 Oct;36(10):3684-9. Male and female SD rats (200 to 250g). % of dose (in total): 20 - 50. Parent drug accounted for 82.52 -88.51% of that.
Peptide: BQ-123	89.8	infusion	60 min	HPLC	610.7	anion	Mrp2	Kato Y, et.al. J Pharmacol Exp Ther. 1999 Feb;288(2):568-74 Male Sprague-Dawley rats weighing approximately 250 to 300g
	87.4 ± 1.4	i.v.	60 min	HPLC				Nakamura T, et.al. J Pharmacol Exp Ther. 1996 Aug;278(2):564-72 Male Sprague-Dawley rats, 7 to 10 weeks of age.
BQ-485	97.4	infusion	60 min	HPLC	628	anion	Mrp2	Kato Y, et.al. J Pharmacol Exp Ther. 1999 Feb;288(2):568-74 Male Sprague-Dawley rats weighing approximately 250 to 300g
BQ-518	89.7	infusion	60 min	HPLC	651	anion	Mrp2	Kato Y, et.al. J Pharmacol Exp Ther. 1999 Feb;288(2):568-74 Male Sprague-Dawley rats weighing approximately 250 to 300g
DPDPE	80	i.v.	90 min	electropherogram	645.79	zwitter		Chen C, et.al. Pharm Res. 1997 Mar;14(3):345-50 Male Sprague-Dawley rats (250-300g)
octreotide	50	i.v.	2 hr	Radioactive	1019.25	cation	P-gp	Yamada T, et.al. Biol Pharm Bull. 1998 Aug;21(8):874-8 Male Sprague-Dawley rats weighing approximately 220g,
	39.4	infusion	60 min	Radioactive				Yamada T, et.al. J Pharmacol Exp Ther. 1996 Dec;279(3):1357-64 Male SDR (approximately 220g). CLtot: 10.53 ± 0.38 ml/min/kg. CLbiliary: 4.15 ± 0.21 ml/min/kg.
	58.9	i.v.	120 min	Radioactive				Yamada T, et.al. Drug Metab Dispos. 1997 May;25(5):536-43 Male SDRs weighing 220g. CLtot: 12.63 ± 0.56 ml/min/kg. CLbiliary: 7.44 ± 0.29 ml/min/kg.
	52	i.v.		HPLC				Lemaire M, et.al. Drug Metab Dispos. 1989 Nov-Dec;17(6):699-703
SK&F 110679	53.1	i.v.	24 hr	Radioactive	873.04	cation		Davis CB, et.al. Drug Metab Dispos. 1994 Jan-Feb;22(1):90-8 Male Sprague-Dawley rats.
Anti-HIV agents: carbovir	1.3 ± 0.6	i.v.	5 hr	HPLC/MS	247.26	neutral		Zimmerman CL, et.al. Drug Metab Dispos. 1993 Sep-Oct;21(5):902-10 Sprague-Dawley rat.
cosalane	1.121 ± 0.071	i.v.	48 hr	HPLC	767.86	anion		Kuchimanchi KR, et.al. Drug Metab Dispos. 2000 Apr;28(4):403-8 Male SD rats weighing 200 to 225 g
lopinavir	0.4	i.v.	24 hr	Radioactive	628.8	neutral	Mrp2, P-gp	Kumar GN, et.al. Pharm Res. 2004 Sep;21(9):1622-30 Sprague-Dawley rats.
nelfinavir	0.048	i.v.	100 min	LC/MS	567.8	cation	P-gp	Kageyama M, et.al. Biol Pharm Bull. 2005 Feb;28(2):316-22 Male Wistar rats (280-320 g). Amount excreted into bile: 0.359 ± 0.027 µg. Dose: 2.5 mg/kg.
ritonavir	1.51 (Male) 5.28 (Female)	i.v.	24 hr	Radioactive	721	neutral	Mrp2, P-gp	Denissen JF, et.al. Drug Metab Dispos. 1997 Apr;25(4):489-501 SD rats (220–270g). % of Dose (in total) in 6 hr: 79.7; Parent drug accounted for 1.9% of that (Male). % of Dose (in total) in 6 hr: 41.6; Parent drug accounted for 12.7% of that (Female).
UK-427,857	40	i.v.	6 hr	Radioactive	514	cation	P-gp	Walker DK, et.al. Drug Metab Dispos. 2005 Apr;33(4):587-95 Male Sprague-Dawley rats (250g).
Quaternary Ammoniums: bretylum	16	i.v.	5 hr	Radioactive	244.18	cation		Kuntzman R, et.al. Clin Pharmacol Ther. 1970 Nov-Dec;11(6):829-37

Compounds in Training set	% dose excreted into bile	Administration Route	Collection period	Analytical Method	Molecular Weight	Charge Status	Substrate of Efflux transporters	Reference
emepronium (EME)	12	infusion	2 hr	Radioactive	283.46	cation		Neef C, et.al. Naunyn Schmiedebergs Arch Pharmacol. 1984 Dec;328(2):103-10 Male Wistar rats (approximately 300g). % of Dose (in total): 60; Parent drug accounted for < 20% of that
hexafluorenium	34	i.v.	1 hr	TLC	504.76	cation		Meijer DK, et.al. Eur J Pharmacol. 1971 May;14(3):280-5 Male Wistar rats weighing 200-250g.
pancuronium	3.5 ± 1.1	i.v.	7 hr	spectrometric	574.9	cation		Upton RA, et.al. Anesth Analg. 1982 Apr;61(4):313-6 Male Sprague-Dawley rats, weighting 250-350g.
triethylmethylammonium (TEMA)	0.71 ± 0.07	i.v.	3 hr	Radioactive	117.24	cation		Hong SS, et.al. Pharm Res. 2000 Jul;17(7):833-8. Male Sprague-Dawley rats, 7 to 8 weeks of age.
	0.3	i.v.	2 hr	Radioactive				Neef C, et.al. Naunyn Schmiedebergs Arch Pharmacol. 1984 Dec;328(2):103-10 Male Wistar rats, weighing approximately 300g.
	0.17 ± 0.03	i.v.		Radioactive				Han YH, et.al. Drug Metab Dispos. 1999 Aug;27(8):872-9 Male Wistar rats (250–300g).
tributylmethylammonium (TBuMA)	33.30 ± 2.78	i.v.	3 hr	Radioactive	201.4	cation	P-gp	Hong SS, et.al. Pharm Res. 2000 Jul;17(7):833-8. Male Sprague-Dawley rats, 7 to 8 weeks of age.
	34.5 ± 1.60	i.v.						Han YH, et.al. Drug Metab Dispos. 1999 Aug;27(8):872-9 Male Wistar rats (250–300g).
	28.7 ± 2.6	i.v.	4 hr	Radioactive				Hong SS, et.al. Arch Pharm Res. 2005 Mar;28(3):330-4 Male Sprague-Dawley rats, 7 to 8 weeks of age.
	45	i.v.	2 hr	Radioactive				Neef C, et.al. Naunyn Schmiedebergs Arch Pharmacol. 1984 Dec;328(2):103-10 Male Wistar rats, weighing approximately 300g.
	26.47 ± 1.12	i.v.	7 hr	Radioactive				Lee IK, et.al. Arch Pharm Res. 2002 Dec;25(6):969-72 Male Sprague-Dawley rats (250-270g).
	29.7 ± 3.4	i.v.	2 hr	Radioactive				Jansen PL, et.al. Hepatology. 1987 Jan-Feb;7(1):71-6. Wistar rats: 200-250g.
Sulfanilamide:								
succinylsulphathiazole	29 (23 - 39)	i.v.	3 hr	Chromatography	355	anion		Abou-El-Makarem MM, et.al. Biochem J. 1967 Dec;105(3):1289-1293 Female Wistar albino rats (200 ± 20g).
glutaryl sulphathiazole	42 (34 - 50)	i.v.	3 hr	spectrometry	369	anion		Hiron PC, et.al. Biochem J. 1972 Oct;129(5):1071-7. Female Wistar albino rats (180-350g body wt.)
adipyl sulphathiazole	40 (38 -44)	i.v.	3 hr	spectrometry	383	anion		Hiron PC, et.al. Biochem J. 1972 Oct;129(5):1071-7. Female Wistar albino rats (180-350g body wt.)
1,2,3,6-Tetrahydrophthalylsulphathiazole	45 (43 -51)	i.v.	3 hr	spectrometry	407	anion		Hiron PC, et.al. Biochem J. 1972 Oct;129(5):1071-7. Female Wistar albino rats (180-350g body wt.)
hexahydrophthalylsulphathiazole	80 (69 -90)	i.v.	3 hr	spectrometry	409	anion		Hiron PC, et.al. Biochem J. 1972 Oct;129(5):1071-7. Female Wistar albino rats (180-350g body wt.)
arylamino sulphonic acids:								
sulphanilic acid	0.38	i.v.	6 hr		173.19	anion		McMahon KA, et.al. Food Cosmet Toxicol. 1969 Sep;7(5):497-500 Rats (250-350 g body weight)
2-Aminotoluene-5-sulphonic acid	0.27	i.v.	6 hr		187.21	anion		Food Cosmet Toxicol. 1969 Sep;7(5):497-500 Rats (250-350 g body weight)
2-Ethylsulphanilic acid	0.29	i.v.	6 hr		201.24	anion		Food Cosmet Toxicol. 1969 Sep;7(5):497-500 Rats (250-350 g body weight)

Compounds in Training set	% dose excreted into bile	Administration Route	Collection period	Analytical Method	Molecular Weight	Charge Status	Substrate of Efflux transporters	Reference
Others: aprepitant	7	i.v.	48 hr	Radioactive	534.43	cation	P-gp	Huskey SE, et.al. Drug Metab Dispos. 2004 Feb;32(2):246-58 Male SD rats (230–300 g)
bishydroxycoumarin	1.88	i.v.	6 hr	Radioactive	336.3	anion		Buttar HS, et.al. Br J Pharmacol. 1973 Jun;48(2):278-87. Male Albino rats (Wistar, 275 - 355g). % of Dose (in total): 12.3 ± 2.7, Parent drug accounted for 15.3 (12.5-18.4) % of that.
cadralazine	3.7	i.v.	7 hr	Radioactive	283.2	cation		Eur J Drug Metab Pharmacokinet. 1983;8(1):25-33. Male and female Sprague Dawley rats with an average body weight of 150 to 180 g.
fexofenadine	40.3	infusion	180 min	LC/MS	501.6	zwitter	P-gp	Tahara H, et.al. Drug Metab Dispos. 2005 Jul;33(7):963-8 SD rats, 300-350g. CLtot: 28.3 ± 2.1 ml/min/kg; CLbiliary: 11.4 ± 1.6 ml/min/kg.
furosemide	1.17 ± 1.06	infusion	2 hr	LC/MS	331	anion		Chen C, et.al. Pharm Res. 2003 Jan;20(1):31-7. Male Sprague–Dawley rats, 15 weeks of age (385 – 550g)
gemfibrozil	0.1	i.v.	4 hr	radioactive	250	anion		Dix KJ, et.al. Drug Metab Dispos. 1999 Jan;27(1):138-46 Female Sprague-Dawley rats (10–12 weeks old).
J-104132	99.7 ± 1.3	i.v.	48 hr	Radioactive HPLC	531.6	anion	Mrp2	Kobayashi N, et.al. Pharm Res. 2003 Jan;20(1):89-95 Male SDRs (250–470 g).
merck compound A	30	i.v.	24 hr	Radioactive/HPLC	552.16	zwitter		Giuliano C, et.al. Xenobiotica. 2005 Oct-Nov;35(10-11):1035-54 Male Sprague–Dawley rats weighing 250–300g.
MK-571	21	i.v.	24 hr	Radioactive	515.09	anion		Tocco DJ, et.al. Drug Metab Dispos. 1990 Jul-Aug;18(4):388-92 Male Sprague-Dawley rats weighing approximately 260g.
mycophenolic acid	0.15 (Wistar) 0.07 (SD)	i.v.	60 min	HPLC	320	anion		Kobayashi M, et.al. J Pharmacol Exp Ther. 2004 Jun;309(3):1029-35 Wistar Rats: 260-380g; SD rats: 350-390g
phenytoin (diphenylhydantoin)	0.21, 0.38	i.v.	6 hr	Radioactive	252.27	anion	Mrp2, P-gp	Inaba T, et.al. Drug Metab Dispos. 1975 Mar-Apr;3(2):69-73 Wistar rats (250-330 g). % of Dose (in total): 28 or 54, Parent drug accounted for about 0.3 - 1.1% of that.
	0.61	i.v.	2 hr	Radioactive				EI-Hawari AM, et.al. J Pharmacol Exp Ther. 1977 Apr;201(1):14-25 Male SD rats (180-280 g). % of Dose (in total) in 2 hr: 32, Parent drug accounted for 1.9 ± 0.2% of that.
PhIP	3.09 ± 0.59	i.v.	2 hr	Radioactive	224.3	neutral	Mrp2, P-gp	Dietrich CG, et.al. Carcinogenesis. 2001 May;22(5):805-11 Female wistar rats (200 - 250g).
probenecid	10 ± 0.5	i.v.	8 hr	GLC	285.36	anion	Mrp2	CONWAY W, et.al. J Pharm Sci. 1974 Oct;63(10):1551-4 Male SD rats weighting 420- 530g.
	13.85 21.83 8.79	i.v.	90 min	Radioactive				Guarino AM, et.al. J Pharmacol Exp Ther. 1968 Dec;164(2):387-95 Male Sprague-Dawley rats, weighing 250 to 320g. % of Dose (in total): 85.5 ± 2.7, 57.9 ± 4.0, 25.4 ± 3.4. Parent drug accounted for 16.2%, 37.7% and 34.6% of that.
proxicromil	4.4	i.v.	6 hr	HPLC	302.33	anion		Smith DA, et.al. Eur J Drug Metab Pharmacokinet. 1983 Jul-Sep;8(3):225-32 CRCD rats. Amount excreted into bile: 110 µg. Dose: 10 mg/kg. Weight assumed to be 250 g.
PSC833 (Valspodar)	0.86 (0.313 - 1.14)	i.v.	3 hr	Radioactive/HPLC	1214.6	neutral		Song S, et.al. Drug Metab Dispos. 1998 Nov;26(11):1128-33 Female Sprague-Dawley rats (10 weeks of age, weighing 220–270g)
remikiren	37.1, 32.1	i.v.	48 hr	HPLC, Radioactive	630.8	neutral		Coassolo P, et.al. Xenobiotica. 1996 Mar;26(3):333-45 Male albino SPF rats (weight 280-320 g)

Compounds in Training set	% dose excreted into bile	Administration Route	Collection period	Analytical Method	Molecular Weight	Charge Status	Substrate of Efflux transporters	Reference
SB-265,123	1.4, 4.2	i.v.	10 hr	HPLC	402.49	anion		WARD K, et.al. Drug Metab Dispos. 1999 Nov;27(11):1232-41 male Sprague-Dawley rats weighing 290 to 350 g.
temazepam	0.5	i.v.	3 hr	Radioactive/TLC	300.74	neutral		Tse FL, et.al. J Pharm Sci. 1983 Mar;72(3):311-2 Male Wistar strain rats average weight 250g
temocaprilat	47 ± 5	i.v.	60 min	Radioactive	448.6	anion	Mrp2	Takikawa H, et.al. Hepatol Res. 2002 Oct;24(2):136 Male Sprague-Dawley rats (270 g)
	77.5 ± 0.9	i.v.	6 hr	Radioactive TLC				Ishizuka H, et.al. J Pharmacol Exp Ther. 1997 Mar;280(3):1304-11 Male Sprague-Dawley rats (7 weeks old)
	77	infusion		Radioactive				Ishizuka H, et.al. J Pharmacol Exp Ther. 1999 Sep;290(3):1324-30 Male Sprague-Dawley (SD) rats.
terbutaline	7.88	i.v.	3 hr	Radioactive	225.29	cation		Eriksson H, et.al. Acta Physiol Scand. 1975 Sep;95(1):1-5 Mak SPF Sprague-Dawley mts, wetghing 250 -300g. CLtot: 5.2 ml/min/kg; CLbiliary: 0.41 ml/ming/kg.
tetrahydrocannabinol	0.068	i.v.	6 hr	Radioactive	314.47	neutral		Widman M, et.al. Biochem Pharmacol. 1974 Apr 1;23(7):1163-72 Sprague-Dawley rats. % of Dose (in total) in 6 hr: 68, Parent drug accounted for 0.1% of that.
thyroxine (T4)	3.46 ± 1.12	i.v.	24 hr	Radioactive/HPLC	776.87	anion	Mrp2, P-gp	Wong H, et.al. Toxicol Sci. 2005 Apr;84(2):232-42 Male Sprague-Dawley rats approximately 8-10 weeks old (~ 225-325g).
tolrestat	54.75	i.v.	4 hr	Radioactive	357.35	anion		Cayen MN, et.al. Drug Metab Dispos. 1985 Jul-Aug;13(4):412-9 Male albino SD rats (200-250 g). % of Dose (in total): 73 in 4 hr; Parent drug accounted for 75% of that.
TPBE	0.8 ± 0.5	i.v.	24 hr	Radioactive	628.73	cation		Dow J, et.al. Xenobiotica. 1982 Oct;12(10):633-43 Male Sprague-Dawley rats of approx. 150g
TR-14035	29.4 ± 4.1	i.v.	4 hr	LC-MS	474.34	anion	Mrp2	Tsuda-Tsukimoto N, et.al. Pharm Res. 2006 Nov;23(11):2646-56 Male Sprague-Dawley rats weighing 250 to 320 g.
UK-224,671	28.9	i.v.	4 d	Radioactive/HPLC	543.55	cation	P-gp	Beaumont K, et.al. Eur J Pharm Sci. 2000 Nov;12(1):41-50 Male Sprague-Dawley rats.
UK-240,455	23.2 ± 6.5	i.v.		Radioactive/HPLC	368.19	anion		Webster R, et.al. Xenobiotica. 2003 May;33(5):541-60 Male Sprague-Dawley rats (300-350g).
valsartan	70	i.v.	2 hr	Radioactive	435.5	anion	Mrp2	Yamashiro W, et.al. Drug Metab Dispos. 2006 Jul;34(7):1247-54 Male Sprague-Dawley (SD) rats (7-8 weeks old).
digoxin	30.9 ± 2.4	i.v.	6 hr	Radioactive/HPLC	781	neutral	P-gp	Song S, et.al. Drug Metab Dispos. 1999 Jun;27(6):689-94 Female Sprague-Dawley (SD) rats weighing 220 to 270g.
ouabain	58.3 ± 5.8	i.v.	40 min	Radioactive	584.67	neutral		Kitani K, et.al. Clin Exp Pharmacol Physiol. 1978 Mar-Apr;5(2):117-24 Male Wistar rats (240g)
	45 ± 3.6							Kitani K, et.al. Exp Gerontol. 1978;13(1-2):9-17 Male Wistar rats (3 months).
	76	i.v.	90 min	Radioactive				Jansen PL, et.al. Hepatology. 1987 Jan-Feb;7(1):71-6. Homozygous TM rats (200 to 250g)
	62.4 ± 0.8	i.v.	90 min	Radioactive				Bowmer CJ, et.al. Br J Pharmacol. 1984 Nov;83(3):773-82 Male Wistar albino rats (250-350g)
	43 ± 7	i.v.	60 min	Radioactive				

Compounds in Test set	% dose excreted into bile	Administration Route	Collection period	Analytical Method	Molecular Weight	Charge Status	Substrate of Efflux transporters	Reference
benoxaprofen	0.7 ± 0.1 (R-) 3.0 ± 0.4 (S-)	i.v.	12 hr	HPLC	301.72	anion		Mohri K, et.al. Pharm Res. 2005 Jan;22(1):79-85 Male SD rats (250 - 300g)
carprofen	9.84 (R-) 5.70 (S-)	i.v.	4 hr	Radioactive/TLC	273.71	anion		Kemmerer JM, et.al.J Pharm Sci. 1979 Oct;68(10):1274-80 Male rats (200-300g)
cefazedone	37.4	i.v.	24 hr	HPLC/TLC	548.43	anion		Sailer H, et.al. Arzneimittelforschung. 1979;29(2a):404-11 Male and female Wistar-WU rats (weight range 175-320g)
ceftriaxone	61.8 ± 2.6	i.v.	8 hr	Bioassay	554.58	anion	Mrp-2	Matsui H, et.al. Antimicrob Agents Chemother. 1984 Aug;26(2):204-7 male SD rats (body weight, 200 to 250 g)
CP-671,305	50 - 60	i.v	24 hr	LC/MS	454.41	anion	Mrp2	Kalgutkar AS, et.al. Xenobiotica. 2004 Aug;34(8):755-70 Male and female Sprague–Dawley rats (220–250g)
	35 ± 19	i.v	24 hr	LC-MS/MS				Kalgutkar AS, et.al. Drug Metab Dispos. 2007 Nov;35(11):2111-8 Male Sprague-Dawley rats (230–250g)
cromoglycate	71.4 ± 18.2	i.v.	5 hr	Radioactive	468.38	anion		Ashton MJ, et.al. Toxicol Appl Pharmacol. 1973 Nov;26(3):319-28 Male Sprague-Dawley rats (200 - 250g)
edatrexate	43.35	i.v.	4 hr	Radioactive/HPLC	467.48	anion		Fanucchi MP, et.al. Cancer Res. 1987 May 1;47(9):2334-9 Male CD rats. % of Dose (in total): 51 ± 4; Parent drug accounted for 85% of that.
5-fluorouracil (5-FU)	0.4	i.v.	95 min	Radioactive/TLC	130.08	anion		Young D, et.al. Nuklearmedizin. 1982 Feb;21(1):1-7. Male Fischer rats weighing 150 - 200g
FPL 55712	50 ± 17	i.v.	2 hr	Radioactive	498.53	anion		Mead B, et.al. J Pharm Pharmacol. 1981 Oct;33(10):682-4 Male Wistar rats
methasquin (NSC 122870)	37 - 39 16 - 24	i.v.	4-5 hr	Chromatography Bioassay	438.45	anion		Rader JI, et.al. Cancer Res. 1971 Jul;31(7):964-9 CD males, 230 to 420 g
nafenopin	4	i.v.	1 hr	Radioactive	310.39	anion		Jedlitschky G, et.al. Biochem Pharmacol. 1994 Sep 15;48(6):1113-20 % of Dose (in total): 40; Parent drug accounted for 10% of that.
nitrofurantoin	5.16 ± 0.96	i.v.	2 hr	HPLC	238.16	anion		Wang X, et.al. Drug Metab Dispos. 2007 Feb;35(2):268-74 Female SD rats (220g)
penicillin V	29.5 ± 3.1	i.v	9 hr	Spectrofluorometry	350.39	anion		Tsuji A, et.al. J Pharm Sci. 1983 Nov;72(11):1239-52. Male Wistar rats (240g).
phthalylsulphathiazole	20.46	i.v	3 hr	spectrometry	403	anion		Hiron PC, et.al. Biochem J. 1972 Oct;129(5):1071-7. Female Wistar albino rats (180-350g body wt.). % of Dose (in total): 22 (20-25). Parent drug accounted for more than 93% of that.
prostacyclin (PGI ₂)	0	i.v.	3 hr	Radioactive	352.47	anion		Taylor BM, et.al. J Pharmacol Exp Ther. 1980 Jul;214(1):24-30 Female SD rats (200 - 250g)
QMPB	0	i.v.	6-7 hr	HPLC	370.4	anion		Christensen A, et.al. Xenobiotica. 1990 Apr;20(4):417-34 female Sprague-Dawley rat, body wt 200g
rosuvastatin	74.3	infusion	2 hr	TLC	481.54	anion		Kitamura S, et.al. Drug Metab Dispos. 2008 Oct;36(10):2014-23 Male Sprague-Dawley rats (9 weeks old)

Compounds in Test set	% dose excreted into bile	Administration Route	Collection period	Analytical Method	Molecular Weight	Charge Status	Substrate of Efflux transporters	Reference
sulfaethidole	18.5	i.v.	8 hr	Colorimeter	284.36	anion		Kekki M, et.al. J Pharmacokinet Biopharm. 1982 Feb;10(1):27-51 Male Sprague-Dawley rats weighting 356 ± 12 g
triiodothyroacetic acid	1.05	i.v.	4 hr	Radioactive	621.94	anion		Rutgers M, et.al. Endocrinology. 1989 Jul;125(1):433-43. Male Wistar rats (approximately 200 g). % of Dose (in total): 42 ± 4; Parent drug accounted for less than 2.5% of that.
verlukast	14.5	i.v.	4 hr	HPLC	515.09	anion		Nicoll-Griffith DA, et.al. Drug Metab Dispos. 1995 Oct;23(10):1085-93 male SD rats (~ 350g)
YM-13115	72.2 ± 1.2	i.v.	24 hr	Bioassay	644.67	anion		Matsui H, et.al. Antimicrob Agents Chemother. 1984 Aug;26(2):204-7 male SD rats (body weight, 200 to 250 g)
belotecan	28.29 ± 2.83	i.v.	12 hr	HPLC	433.5	cation	Mrp2, P-gp	Namkoong EM, et.al. Arch Pharm Res. 2007 Nov;30(11):1482-8 Male SD rats (260 - 290g)
butopropazine	0	i.v.			434.63	cation		Overzet F, et.al. Xenobiotica. 1985 Jan;15(1):1-10. male Wistar rats (body wt. 300g)
celiptium (NSC-264137)	6.1	i.v.	12 hr	HPLC	278.36	cation		Maftouh M, et.al. Xenobiotica. 1983 May;13(5):303-10 Male SD rats (300 - 350g).
DA-5018 (Capsavanil)	3.06	i.v.	24 hr	HPLC	370.5	cation		Shim HJ, et.al. J Chromatogr B Biomed Sci Appl. 1997 Feb 21;689(2):422-6.
dasatinib	11.2	i.v.	12 hr	Radioactive/HPLC	488.01	cation	P-gp	Christopher LJ, et.al. Drug Metab Dispos. 2008 Jul;36(7):1341-56. male Sprague-Dawley rats weighing approximately 340 to 380g.
17-DMAG (NSC 707545)	2.38	i.v.	4 hr	HPLC	616.75	cation		Egorin MJ, et.al. Cancer Chemother Pharmacol. 2002 Jan;49(1):7-19. Male Fischer 344 rats (7-8 weeks of age). % of Dose (in total): 4.7 ± 1.4. Parent drug accounted for 50.7 ± 3.4% of that.
EMDP	0.2	i.v.	4 hr	GC/MS	309.5	cation		Baselt RC, et.al. Biochem Pharmacol. 1973 Dec 1;22(23):3117-20 Sprague-Dawley male rats (200 - 300 g).
ID-6105	18.5 26.7 14.1	i.v. i.v.	48 hr 12 hr	HPLC HPLC	840.89	cation		Yoo BI, et.al. Biol Pharm Bull. 2005 Apr;28(4):688-93 Male SD rats (230 - 250 g) Yoo BI, et.a. Arch Pharm Res. 2005 Apr;28(4):476-82 Male SD rats (230 - 250 g)
methadone	8.8	i.v.	4 hr	GC/MS	309.5	cation	P-gp	Baselt RC, et.al. Biochem Pharmacol. 1973 Dec 1;22(23):3117-20 Sprague-Dawley male rats (200 - 300 g).
N2-methyl-9-hydroxyolivacinium	2.2	i.v.	12 hr	HPLC	278.36	cation		Maftouh M, et.al. Xenobiotica. 1983 May;13(5):303-10 Male SD rats (300 - 350g).
naftopidil	6.6	i.v.	96 hr	Radioactive/TLC	392.49	cation		Niebch G, et.al. Arzneimittelforschung. 1991 Oct;41(10):1027-32 Male Sprague-Dawley rats (150-200g)
pipecuronium	4.48	i.v.	4 hr	Radioactive	604.92	cation		Bodrogi L, et.al. Arzneimittelforschung. 1980;30(2a):366-70 Female rats weighing 200 to 320g. % of Dose (in total): 6.36; Parent drug accounted for 69 - 72% of that.
reproterol	4.09	i.v.	4 hr	Radioactive	389.4	cation		Kucharczyk N, et.al. Arzneimittelforschung. 1981;31(12):2085-8. Male Charles River rats (165-275g). % of Dose (in total): 45.33 ± 4.62; Parent drug accounted for 1.7 to 13% of that.

Compounds in Test set	% dose excreted into bile	Administration Route	Collection period	Analytical Method	Molecular Weight	Charge Status	Substrate of Efflux transporters	Reference
sitagliptin	16.38	i.v.	3 d	LC/MS/MS	407.31	cation	P-gp	Beconi MG, et.al. Drug Metab Dispos. 2007 Apr;35(4):525-32 Male SD rats (360 - 450g). % of Dose (in total): 21; Parent drug accounted for 78% of that.
trifluoperazine	0.3	i.v.	4 hr	Radioactive/TLC	407.5	cation		Schmalzing G, et.al. Xenobiotica. 1978 Jan;8(1):45-54 Male Wistar rats. 200-250g.
trimetrexate	0.8 ± 0.3	i.v.	48 hr	Radioactive/HPLC	369.42	cation		Wong BK, et.al. Drug Metab Dispos. 1990 Nov-Dec;18(6):980-6 Male SD rats (333 to 382g).
vecuronium	46 ± 4	i.v.	7 hr	spectrometric	558.85	cation	P-gp	Upton RA, et.al. Anesth Analg. 1982 Apr;61(4):313-6 Male Sprague-Dawley rats, weighting 250-350g.
xamoterol	0	i.v.	3 hr	Radioactive/TLC	339.39	cation		Mulder GJ, et.al. Xenobiotica. 1987 Jan;17(1):85-92 Male Wistar rats (body wt approx. 200g). % of Dose (in total): 40; No unchanged drug existed.
diazepam	0	i.v.	4 hr	Radioactive	284.75	neutral		Inaba T, et.al. Drug Metab Dispos. 1974 Sep-Oct;2(5):429-32 Male Wistar rats (280-320 g).% of Dose (in total): 77; No intact diazepam could be detected in bile.
drotaverine	0	i.v.		TLC	397.52	neutral		Eur J Drug Metab Pharmacokinet. 1980;5(2):69-74
felodipine	0	i.v.	24 hr	Radioactive/HPLC	384.25	neutral		Sutfin TA, et.al. Xenobiotica. 1987 Oct;17(10):1203-14. Male SD rats (350g). % of Dose (in total): 74; No unchanged felodipine was detected in either bile.
lamotrigine	1.4 ± 0.3	i.v.	4 hr	Radioactive/HPLC	256.09	neutral		Maggs JL, et.al. Chem Res Toxicol. 2000 Nov;13(11):1075-81. Male Wistar rats (180-250g)
9-nitro-20(S)-camptothecin (Rubitecan)	9.1 ± 3.4	i.v.	24 hr	HPLC	393.35	neutral	P-gp	Zhong DF, et.al. Acta Pharmacol Sin. 2003 Mar;24(3):256-62. Wistar rats (250 ± 20g)
triamterene	5.5 ± 1.4	i.v.	3 hr	Radioactive	253.26	neutral	P-gp	Kau ST, et.al. Drug Metab Dispos. 1975 Sep-Oct;3(5):345-51. Male SD rats (200 - 250g)