Supplementary Table S2. Active drug transport and metabolic reactions.

Metabolic and active drug transport processes, which were considered in the PBPK models of APAP and CAF, either consist of the metabolic enzyme and the corresponding metabolite, or of the transporter and the corresponding transporter type (efflux is defined as transport of a substance from the intracellular space to the interstitial space or the lumen). Kinetic parameters Km and vmax were used to characterize the kinetic behavior of active processes.

Drug / Metabolite	Metabolite / Transporter type	Metabolic enzyme / Transporter	Km [µmol/l]	Vmax* [µmol/l/min]	Ref.
APAP	APAPG	UGT1A9	9200.00	1078.88	(1)
APAP	APAPS	SULT1A1	2400.00	51.00	(2,3)
APAP	NAPQI	CYP2E1	1300.00	51.02	(4,5)
APAP	Efflux	ABCB1	20308.50*	1220.00	(6,7)
APAPG	Efflux	ABCG2	96.33*	24.51	(6)
APAPS	Efflux	ABCG2	94.49*	1200.00	(6)
NAPQI	APAPC	GSTT1	25.00*	20.16	(5)
CAF	PX	CYP1A2	400.00	19.00	(8)
CAF	TB	CYP1A2	280.00	4.80	(8)
CAF	TP	CYP2E1	2800.00	9.00	(8)
PX	1X	CYP1A2	2500.00	260.00	(9)
TB	7X	CYP1A2	4200.00	280.00	(10)
TP	13U	CYP2E1	15300.00	350.00	(11)

* Estimated

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