

Speciesforskelle

Lægemiddel



Metabolisering (Fase I)



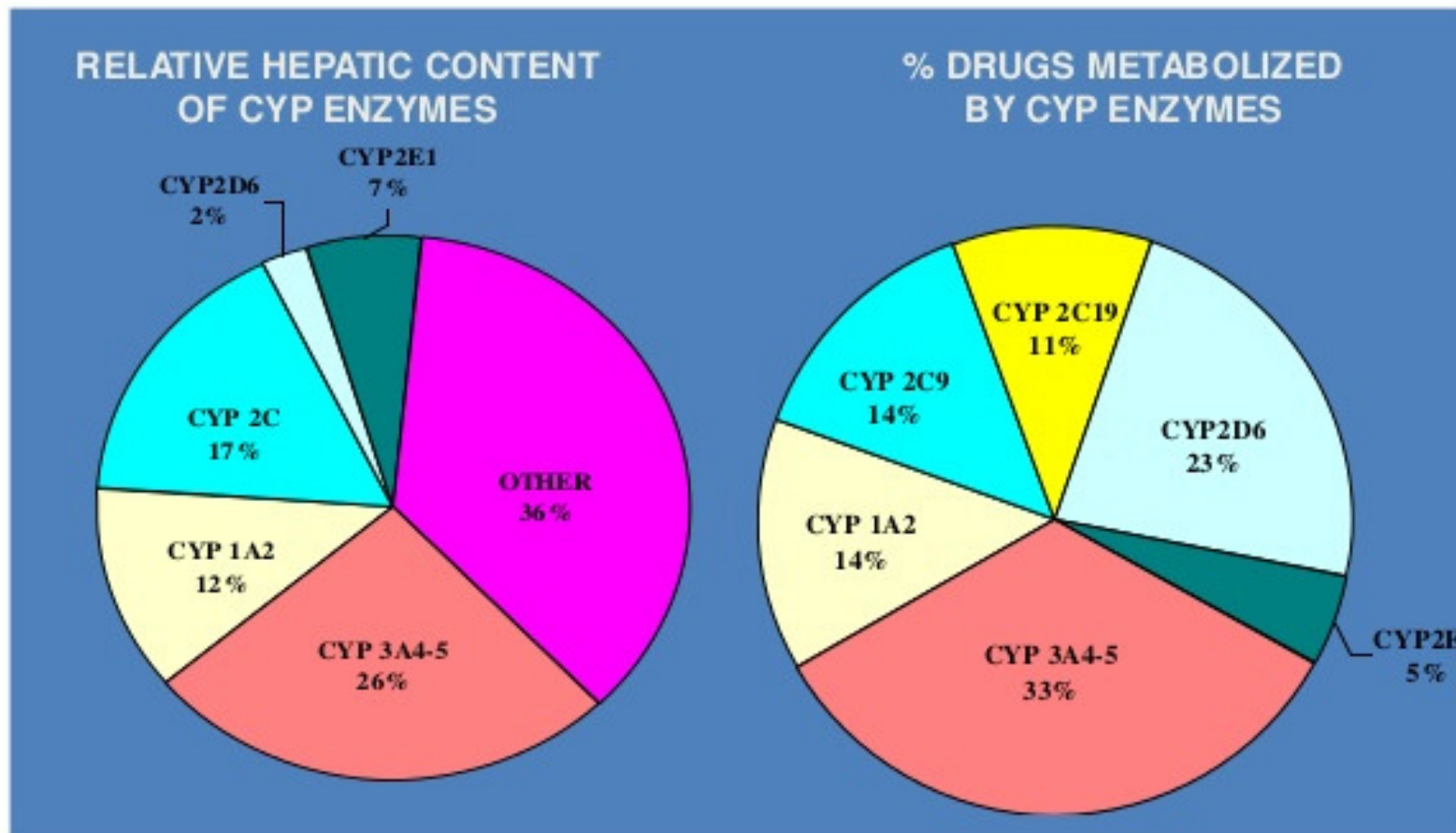
Konjugering (Fase II)



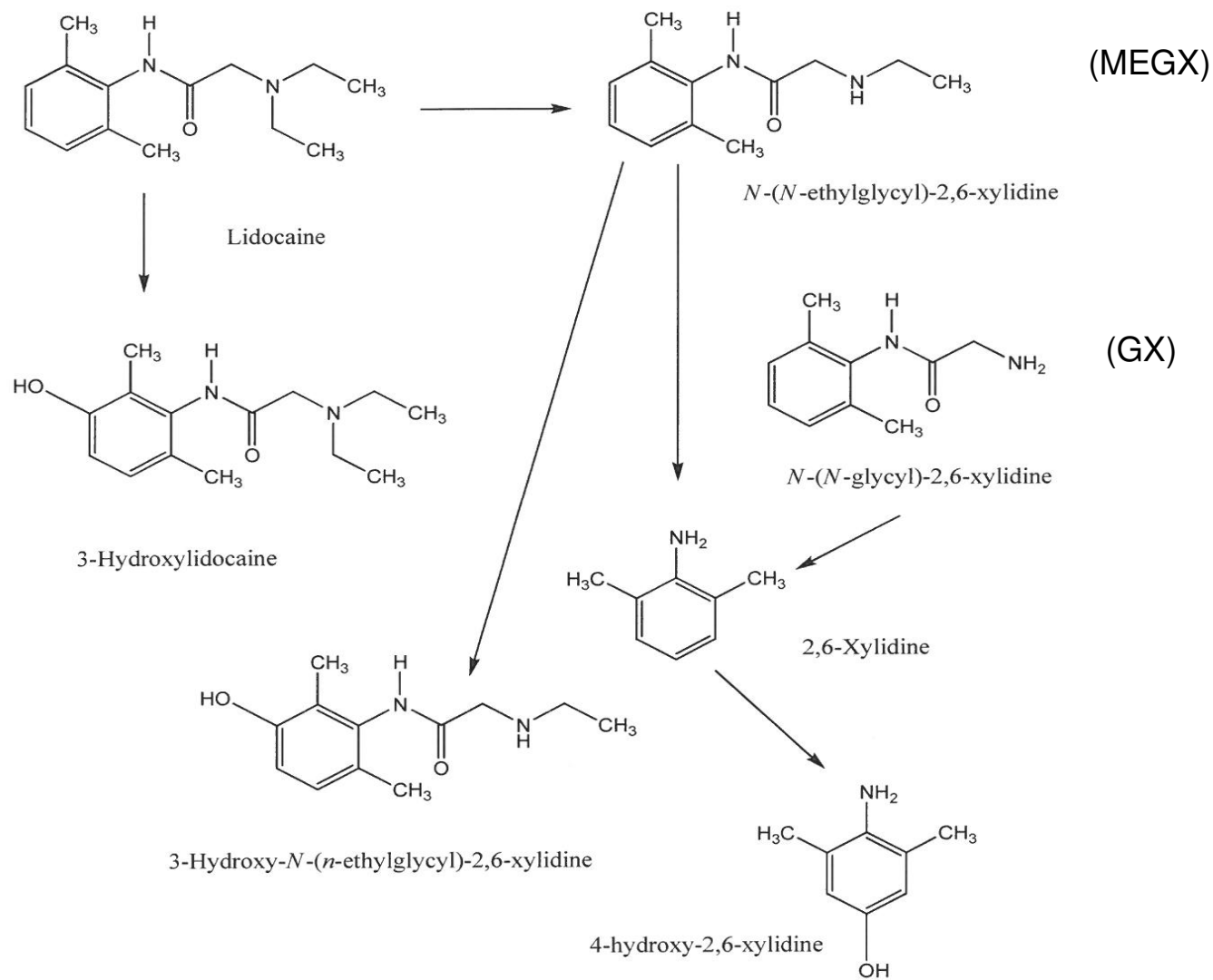
Ekskretion

ROLE OF CYP ENZYMES IN HEPATIC DRUG METABOLISM

In human beings, of the 1000 currently known cytochrome P-450s, about 50 are functionally active. These are categorised into 17 families, out of which the isoenzymes **CYP3A4** and **CYP2D6** carry out biotransformation of largest number of drugs.



Lidocaine



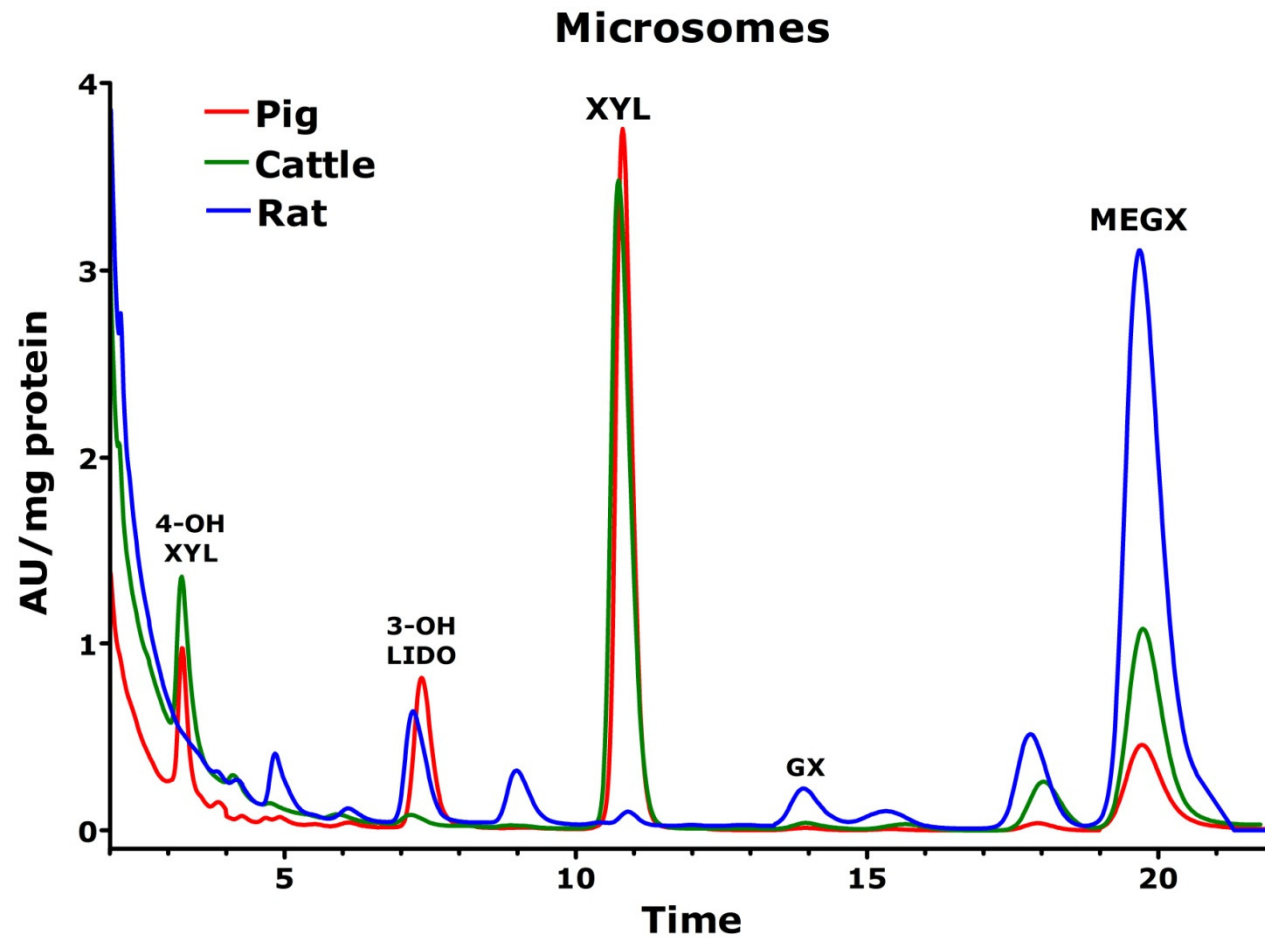
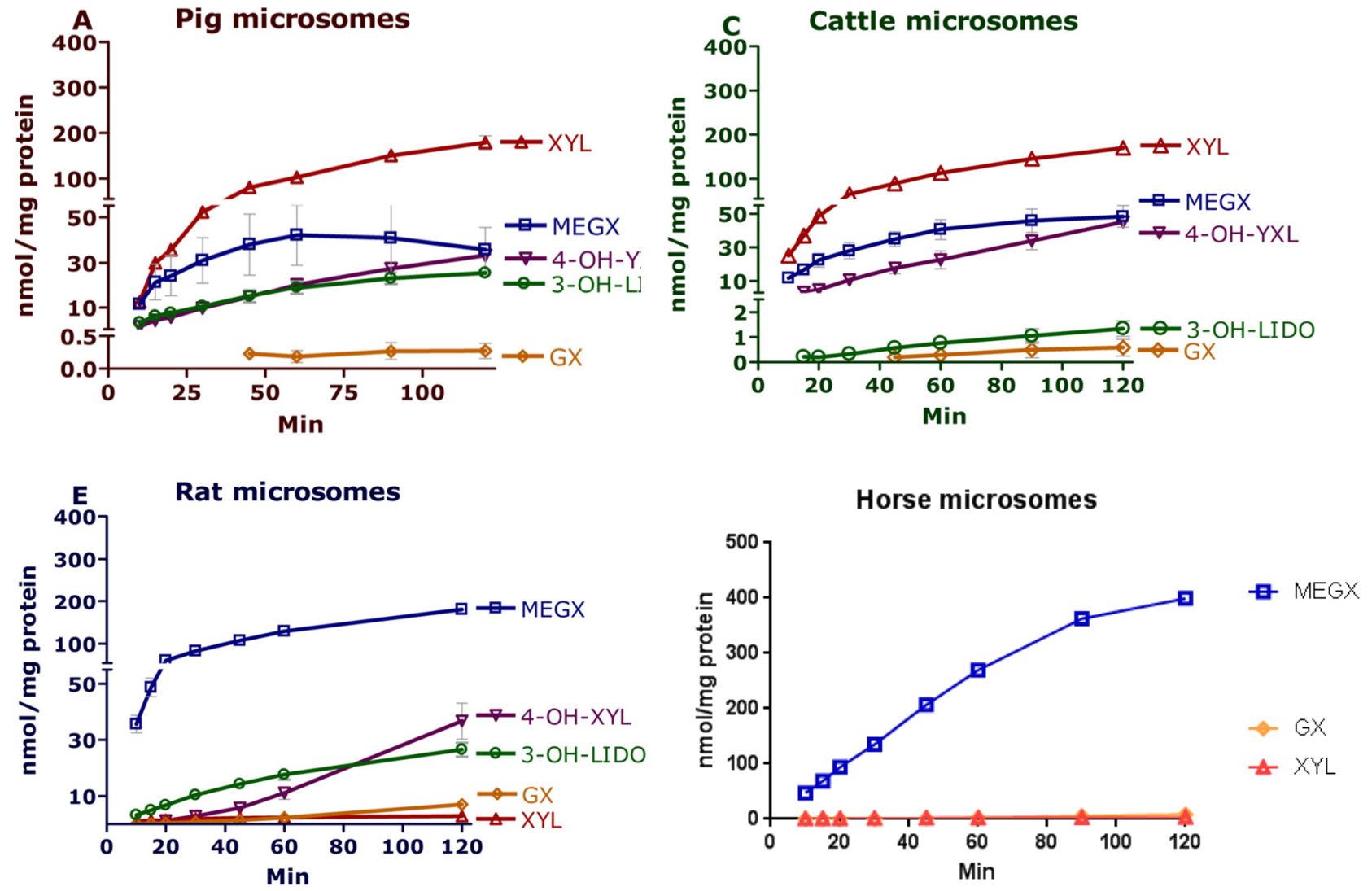
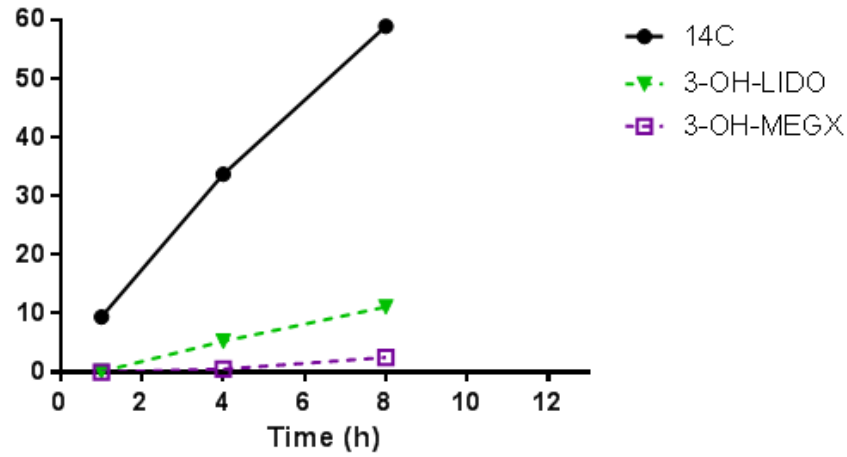


Figure 1: Kinetics of the formation of metabolites in pig, cattle, rat and horse microsomes

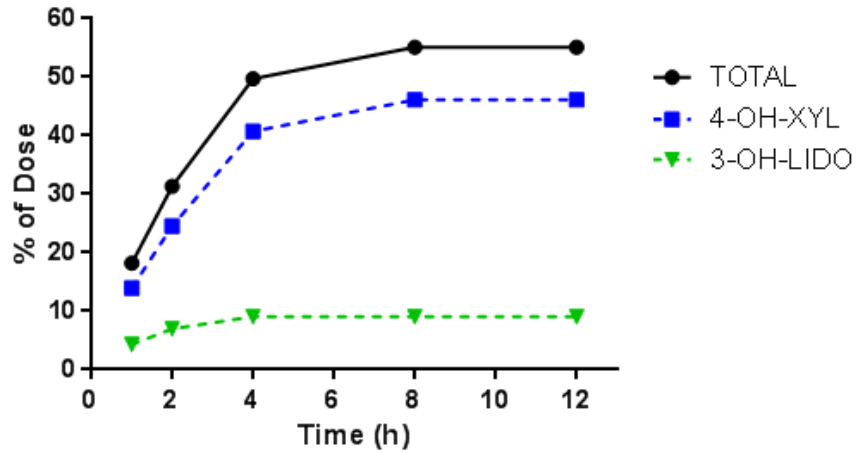


Lidocaine excretion

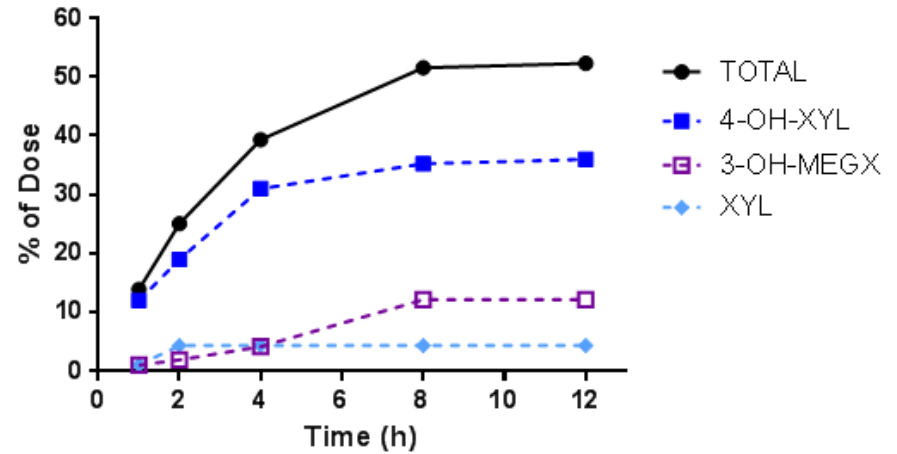
Rat11R24 urine



Pig1202 urine



Heifer 1567 urine



NSAID - halveringstider (timer)

	Hund	kat	hest	kvæg	svin
acetylsalisylsyre	8,6	22-45	1-3	0,5	5,9
phenylbutazon	6	18	4	30-80	4
flunixin	3.7		1,6	3,1	
carprofen	7	15	16	37	
meloxicam	12-36	37	3	13	4
firocoxib	7,5		33		

Sulfonamid/TMP - kinetik

		Kvæg	Hest	Svin	Homo
Sulfadiazin	t $\frac{1}{2}$, h V, l/kg	3 0,4	2,7 0,5	2 0,5	7 0,3
Sulfadoxin	t $\frac{1}{2}$, h V, l/kg	11 0,4	14 0,4	8 0,3	
Sulfatroxazol	t $\frac{1}{2}$, h V, l/kg	6 0,3		6 0,3	
TMP	t $\frac{1}{2}$, h V, l/kg	1 1,1	3 1,5	2 1,8	9-15 1,4