

Metabolic disposition of triazolam and clobazam in humanized CYP3A mice with a double knockout background of mouse *Cyp2c* and *Cyp3a* genes

Kaoru Kobayashi, Genki Minegishi, Nina Kuriyama, Atsushi Miyajima, Satoshi Abe, Kanako Kazuki, Yasuhiro Kazuki

Drug Metabolism and Disposition

Manuscript Number: DMD-AR-2022-001087

Supplemental Table 3. Conditions used for LC-MS/MS analysis.

The LC-MS/MS system consisted of either Shimadzu LCMS8050 equipped with Nexera series HPLC system (System 1) or SCIEX QTRAP4500 equipped with a Shimadzu Prominence series HPLC system (System 2). Data from System 1 and 2 were processed using Lab Solution software (version 5.97 SP1, Shimadzu) and MultiQuant software (version 1.3, SCIEX), respectively. Mobile phases consisted of 0.1% formic acid in distilled water (Mobile phase 1), 0.1% formic acid in acetonitrile/methanol=1/1 (v/v) (Mobile phase 2), 10% methanol in distilled water (Mobile phase 3) and methanol (Mobile phase 4). The column was a COSMOSIL 3C18-MS-II (2.0 mm x 50 mm; Nacalai Tesque). Temperature of the autosampler and column was maintained at 4°C and 40°C, respectively.

Sample	drug	MRM transition	System	retention time (min)	Flow rate (ml/min) Time; rate	Injection volume (μL)	Mobile phase (A/B)	Gradient condition Time; B concentration
incubation mixture	1'-hydroxytriazolam	359.3 > 176.1	1	1.92	0.6	1	1/2	0-0.6 min; 15%
	4-hydroxytriazolam	359.3 > 314.0		1.93				0.6-2.0 min; 15%→90%
	propranolol	260.1 > 116.2		1.59				2.0-3.8 min; 90%
plasma	triazolam	343.0 > 308.1	2	2.40	5	5	0-2.0 min; 15%→90%	3.8-3.81 min; 90%→15%
	1'-hydroxytriazolam	359.0 > 175.9		2.31				3.81-4.51 min; 15%
								2.0-3.7 min; 90%

	4-hydroxytriazolam	359.0 > 313.9		2.32				3.7-3.71 min; 90%→15%
	propranolol	260.1 > 116.0		1.89				3.71-5.0 min; 15%
plasma	CLB	301.1 > 259.3	1	3.30	0-2.4 min; 0.4→0.6	2	3/4	0-1.0 min; 5%
	NCLB	287.1 > 245.2		3.23				1.0-2.4 min; 5%→98%
	oxazepam	287.1 > 241.2		3.35	2.4-7.5 min; 0.6			2.4-7.0 min; 98%
								7.0-7.01 min; 98%→5%
								7.01-7.5 min; 5%