

Fig. S1. Operating cycle of the valve system allowing sampling and analysis of the culture medium (blue and red colors denote open and closed channels, respectively).



Fig. S2. Chromatograms of parent drugs after 200 min of experiment.

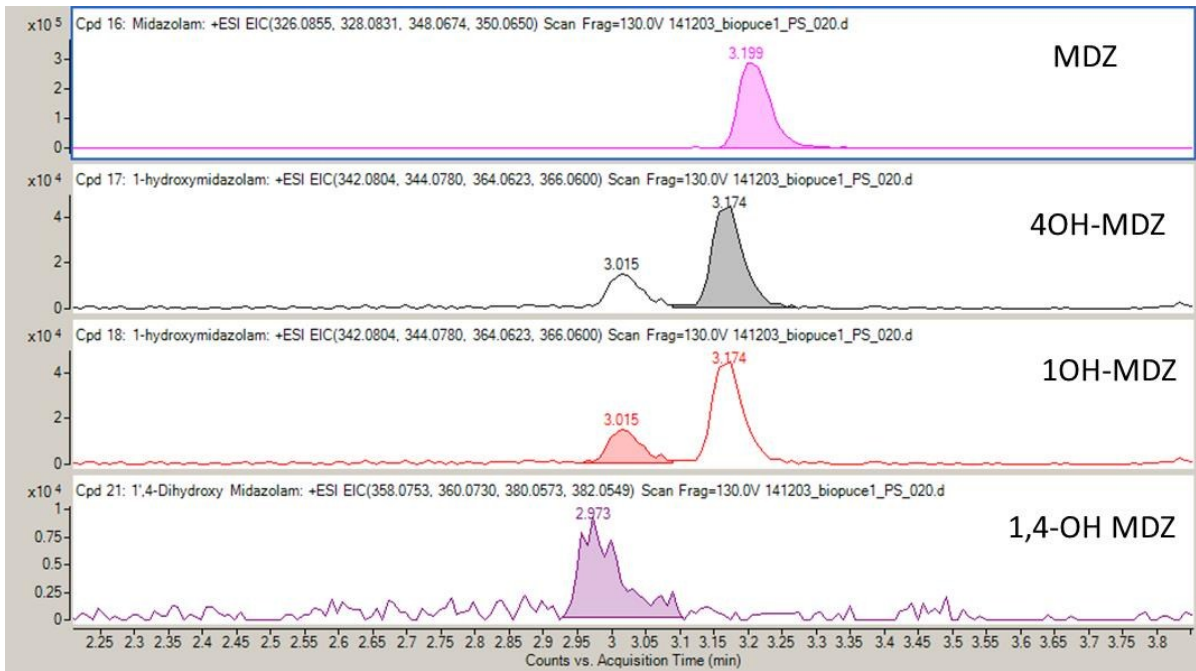


Fig. S3. Chromatograms of midazolam and its metabolites after 200 min of experiment.

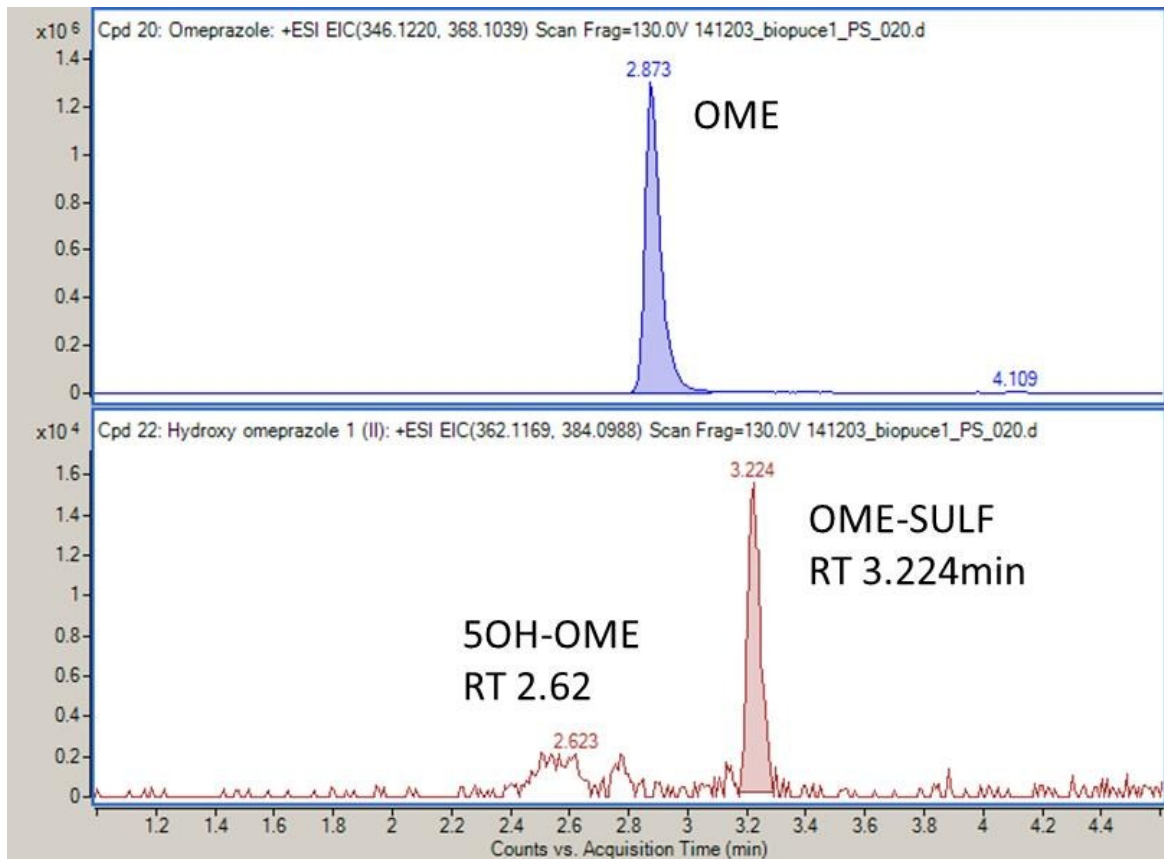


Fig. S4. Chromatograms of omeprazole and its metabolites after 200 min of experiment.

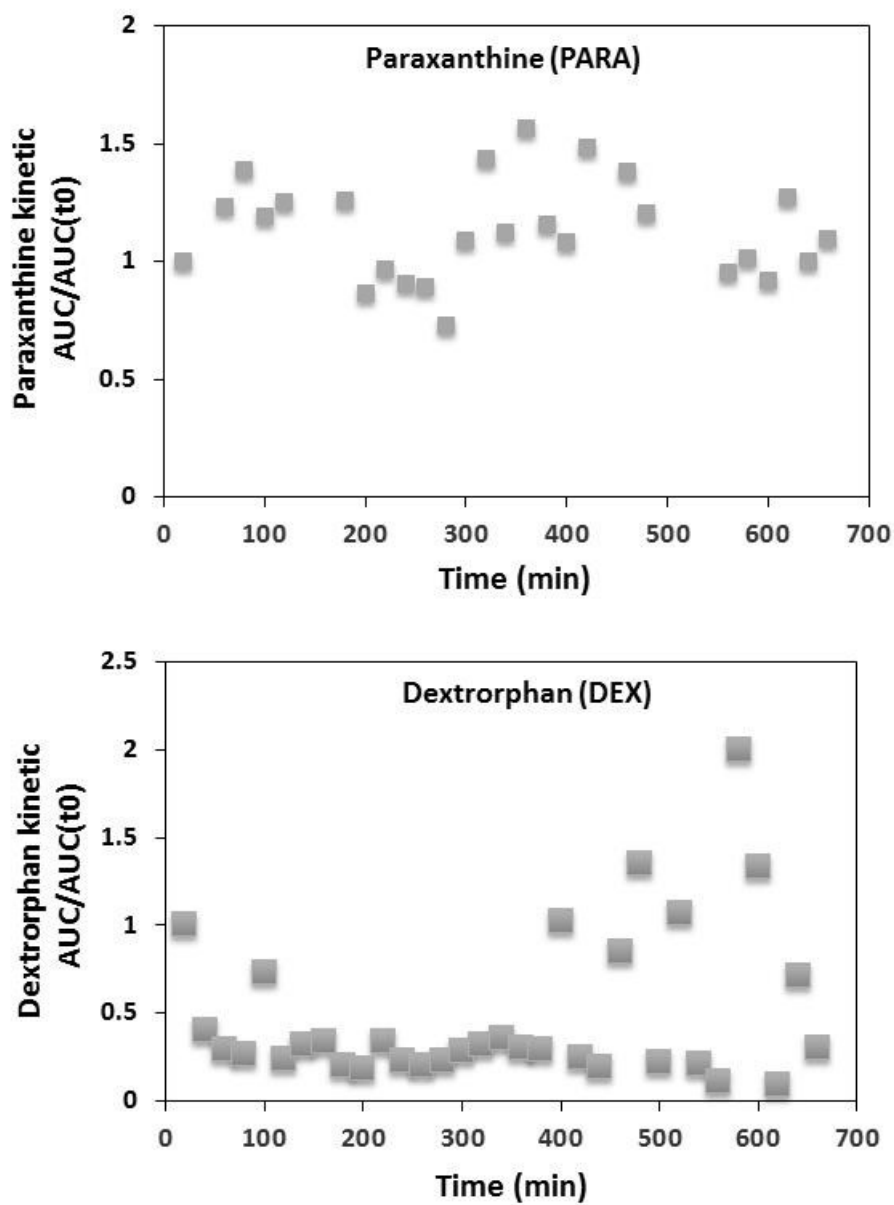


Fig. S5. Online kinetics of paraxanthine and dextrophan.

Table S1. Formula , exact mass and rétention time for all possible métabolite forum litterature.

Family	Compound Name	Abr*	Formula	Mass	[M+H] ⁺	RT**	CAS	Ref#
ATZ	Atrazine	ATZ	C ₈ H ₁₄ ClN ₅	215.0938	216.1011	3.8	1912-24-9	
CAF	Xanthine	XAN	C ₅ H ₄ N ₄ O ₂	152.0334	153.0408		69-89-6	1
CAF	7-Methylxanthine		C ₆ H ₆ N ₄ O ₂	166.0492	167.0565		552-62-5	1
CAF	Paraxanthine	PARA	C ₇ H ₈ N ₄ O ₂	180.0647	181.0721		611-59-6	1
CAF	Theobromine		C ₇ H ₈ N ₄ O ₂	180.0647	181.0721		83-67-0	1
CAF	Theophylline		C ₇ H ₈ N ₄ O ₂	180.0647	181.0721		58-55-9	1
CAF	7 Methyluric acid		C ₆ H ₆ N ₄ O ₃	182.0440	183.0513		612-37-3	1
CAF	Caffeine	CAF	C ₈ H ₁₀ N ₄ O ₂	194.0804	195.0877	2.05	58-08-2	1
CAF	3,7 Dimethyluric acid		C ₇ H ₈ N ₄ O ₃	196.0596	197.0670		13087-49-5	1
CAF	1,7-Dimethyluric acid		C ₇ H ₈ N ₄ O ₃	196.0597	197.0670		33868-03-0	1
CAF	3,7-Dimethyluric acid		C ₇ H ₈ N ₄ O ₃	196.0597	197.0670		13087-49-5	1
CAF	3,6,8-Trimethylallantoin		C ₇ H ₁₂ N ₄ O ₃	200.0910	201.0983		42794-72-9	1
CAF	1,3,7-Trimethyluric acid		C ₈ H ₁₀ N ₄ O ₃	210.0754	211.0827		5415-44-1	1
DEX	3-Methoxymorphiphan	3-MM	C ₁₇ H ₂₃ NO	257.1779	258.1852	3.15	36397-14-5	2
DEX	Dextrorphan	DEX	C ₁₇ H ₂₃ NO	257.1779	258.1852	2.29	125-73-5	2
DEX	Dextrometoprofan	DEXTM	C ₁₈ H ₂₅ NO	271.1936	272.2009	3.18	6700-34-1	2
DEX	3-Hydroxymorphinan GLU	3HM-Glu	C ₂₂ H ₂₉ NO ₇	419.1944	420.2017		N/A	2
DEX	Dextrorphan-O- glucuronide	DXO-Glu	C ₂₃ H ₃₁ NO ₇	433.2100	434.2173		N/A	2
DEX	3-Methoxymorphinan		C ₁₇ H ₂₃ NO	257.1780	258.1853		1531-23-3	2
MDZ	1-Hydroxymidazolam	1-OH-MDZ	C ₁₈ H ₁₃ ClFN ₃ O	341.0731	342.0804		59468-90-5	3
MDZ	4-Hydroxymidazolam	4-OH-MDZ	C ₁₈ H ₁₃ ClFN ₃ O	341.0731	342.0804		59468-85-8	3
MDZ	1',4-Dihydroxy Midazolam		C ₁₈ H ₁₃ ClFN ₃ O ₂	357.0680	358.0754	3.24	64740-68-7	3
MDZ	1'-Hydroxymidazolam β- D-Glucuronide		C ₂₄ H ₂₁ ClFN ₃ O ₇	517.1052	518.1125		81256-81-7	3
MDZ	Midazolam	MDZ	C ₁₈ H ₁₃ ClFN ₃	325.0782	326.0855	3.2	59467-94-6	3
MDZ	midazolam N- Glucuronide		C ₂₄ H ₂₁ ClFN ₃ O ₆	501.1103	502.1176			3
OME	5-O- Desmethylomeprazol		C ₁₆ H ₁₇ N ₃ O ₃ S	331.0991	332.1064		1151602-49-2	4
OME	Omeprazole	OME	C ₁₇ H ₁₉ N ₃ O ₃ S	345.1147	346.1220	2.84	73590-58-6	4
OME	5-OH omeprazole	5-OH-OME	C ₁₇ H ₁₉ N ₃ O ₄ S	361.1096	362.1170	2.62	92340-57-3	4
OME	Omeprazole sulfone	OME-SULF	C ₁₇ H ₁₉ N ₃ O ₄ S	361.1096	362.1170	3.27	88546-55-8	4
OME	Carboxyomeprazol		C ₁₇ H ₁₇ N ₃ O ₃ S	375.0889	376.0962			4
OME	Omeprazole hydroxysulfone		C ₁₇ H ₁₉ N ₃ O ₅ S	377.1045	378.1119			4
PHE	NAPQI	NAPQI	C ₈ H ₇ NO ₂	149.0477	150.0550		50700-49-7	5
PHE	Acetaminophen	APAP	C ₈ H ₉ NO ₂	151.0633	152.0707	1.5	103-90-2	5
PHE	Phenacetin	PHE	C ₁₀ H ₁₃ NO ₂	179.0946	180.1020	3.37	62-44-2	5
PHE	Paracetamol Sulfate		C ₈ H ₉ NO ₅ S	231.0201	232.0275		10066-90-7	5
PHE	Acetaminophen cystein		C ₁₁ H ₁₄ N ₂ O ₃ S	254.0725	255.0798		64014-06-8	5

PHE	Acetaminophen glucuronide	APAP-GLU	C ₁₄ H ₁₇ NO ₈	327.0954	328.1027		120595-80-4	5
REP	Repaglinide	REP	C ₂₇ H ₃₆ N ₂ O ₄	452.2675	453.2748	3.92	135062-02-1	
ROV	Rosuvastatine	ROV	C ₂₂ H ₂₈ FN ₃ O ₆ S	481.1683	482.1756	3.88	287714-41-4	
TOLB	Tolbutamide - M1		C ₈ H ₁₀ N ₂ O ₃ S	214.0412	215.0485			6
TOLB	Tolbutamide	TOLB	C ₁₂ H ₁₈ N ₂ O ₃ S	270.1038	271.1111	3.84	64-77-7	6
TOLB	Tolbutamide M2		C ₁₁ H ₁₆ N ₂ O ₄ S	272.0831	273.0904			6
TOLB	4-Hydroxytolbutamide	4-OH-TOLB	C ₁₂ H ₁₈ N ₂ O ₄ S	286.0987	287.1061		5719-85-7	6
TOLB	Hydroxy Tolbutamide		C ₁₂ H ₁₈ N ₂ O ₄ S	286.0987	287.1061		5719-85-7	6
TOLB	Carboxy tolbutamide		C ₁₂ H ₁₆ N ₂ O ₅ S	300.0780	301.0853		2224-10-4	6

(*) Abbreviation, (**) Retention time (min), (#) Reference.

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