

## BIOANALYTICAL METHODS FOR BIOEQUIVALENCE STUDIES IN HUMAN SAMPLES

COMPOUND	TECHNIQUE	MATRIX	Calibration range
Acetoclofenac*	HPLC-MS/MS	Human Plasma Na citrate	20 – 20000 ng/mL
Acetazolamide*	HPLC-MS/MS	Human Plasma EDTA	250-30000 ng/mL
Acetylsalicylic acid	HPLC-MS/MS	Human Plasma acidified EDTA	2 – 500 ng/mL
Acetylsalicylic acid & salicylic acid	HPLC-MS/MS	Human Plasma EDTA	Acetylsalicylic acid 0.0556 to 4.4444 µg/mL salicylic acid 0.222 to 16.667 µg/mL
Ambroxol	HPLC-MS/MS	Buccopharyngeal lozenges	50 – 2500 ng/mL
Amlodipine*	HPLC-MS/MS	Human Plasma EDTA	50 – 5000 pg/mL
Amoxicillin*	HPLC-MS/MS	Human Plasma EDTA	50 – 25000 ng/mL
Ampicillin*	HPLC-MS/MS	Human Plasma EDTA	50 – 25000 ng/mL
Androstenediol (Adiol)	HPLC-MS/MS	Human Plasma Heparin	50 – 10000 pg/mL
Androstenedione	HPLC-MS/MS	Human Plasma Heparin	15 – 3000 pg/mL
Atorvastatin	HPLC-MS/MS	Human Plasma EDTA	0.25 – 100 ng/mL
Baclofen*	HPLC-MS/MS	Human Plasma EDTA	1 - 1000 ng/mL
Beclomethasone mono and dipropionate	HPLC-MS/MS	Human Plasma EDTA	5 – 3000 pg/mL
Bilobalide	HPLC-MS/MS	Human Plasma Heparin	0.2 - 50 ng/mL
Bisoprolol*	HPLC-MS/MS	Human Plasma EDTA	0.25 - 250 ng/mL



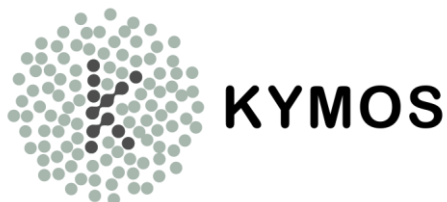
# KYMOS

Budesonide*	HPLC-MS/MS	Human Plasma Heparin	5 - 500 pg/mL
Buprenorphine*	HPLC-MS/MS	Human Plasma EDTA	5 - 1000 pg/mL
Candesartan	HPLC-MS/MS	Human Plasma EDTA	0.5 – 200 ng/mL
Carvedilol	HPLC-MS/MS	Human Plasma Heparin	0.2 – 100 ng/mL
Celecoxib*	HPLC-MS/MS	Human Plasma EDTA	5 – 500 ng/mL
Cefixime*	HPLC-MS/MS	Human Plasma EDTA	2.5 – 2500 ng/mL
Chloral hydrate	GC/ $\mu$ -ECD	Human Plasma Heparin	10 – 100 ng/mL
Chlormadinone acetate	HPLC-MS/MS	Human Plasma EDTA	25 – 5000 pg/mL
Chlorpheniramine*	HPLC-MS/MS	Human Plasma EDTA	0.2 – 100 ng/mL
Clorazepate (as N-desmethyldiazepam)	HPLC-MS/MS	Human Plasma EDTA	0.5 – 500 ng/mL
Clozapine	HPLC-MS/MS	Human Plasma EDTA	0.1 – 60 ng/mL
Cicletanine	HPLC-MS/MS	Human Plasma Heparin	3 – 3000 ng/mL
Ciprofloxacin*	HPLC-MS/MS	Human Plasma EDTA	20 – 10000 ng/mL
Cytisine	HPLC-MS/MS	Human Plasma Lithium Heparin	1 – 400 ng/mL
Clarithromycin*	HPLC-MS/MS	Human Plasma Heparin	10 – 2000 ng/mL
Clavulanic acid*	HPLC-MS/MS	Human Plasma EDTA	20 – 5000 ng/mL
Codeine*	HPLC-MS/MS	Human Plasma Heparin	0.5 – 200 ng/mL
Dehydroepiandrosterone (DHEA)	HPLC-MS/MS	Human Plasma Heparin	100 – 20000 pg/mL
Dehydroepiandrosterone Sulfate (DHEAS)	HPLC-MS/MS	Human Plasma Heparin	20 – 4000 ng/mL

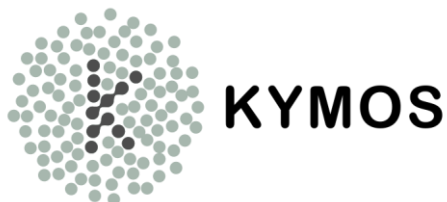


# KYMOS

Desmopressin	HPLC-MS/MS	Human Plasma EDTA	2 – 150 pg/mL
Desogestrel (as 3-ketodesogestrel or etonogestrel)	HPLC-MS/MS	Human Plasma EDTA	25 – 5000 pg/mL
Desloratadine*	HPLC-MS/MS	Human Plasma EDTA	25 – 5000 pg/mL
Dexamethasone*	HPLC-MS/MS	Human Plasma EDTA	100 – 2000 pg/mL
Dexketoprofen	HPLC-MS/MS	Human Plasma Heparin	5 – 5000 ng/mL
Dextromethorphan*	HPLC-MS/MS	Human Plasma EDTA	10 – 5000 pg/mL
Diazepam	HPLC-MS/MS	Human Plasma Na citrate	1 – 500 ng/mL
2,4-dichlorobenzyl alcohol & amylmetacresol	UPLC-UV	Buccopharyngeal lozenges/saliva	2,4-DCBA: 0.6 to 30 µg/mL Amylmetacresol: 0.3 to 15 µg/mL
2,4-dichlorobenzyl alcohol, lidocaine & amylmetacresol	UPLC-UV	Buccopharyngeal lozenges/saliva	2,4-DCBA: 0.6 to 30 µg/mL Lidocaine: 1.0 to 50 µg/mL Amylmetacresol: 0.3 to 15 µg/mL
Diazoxide	HPLC-MS/MS	Human Plasma EDTA	0.05 – 50 ng/mL
Diclofenac	HPLC-MS/MS	Human Plasma EDTA	0.5 – 200 ng/mL
Duloxetine*	HPLC-MS/MS	Human Plasma EDTA	0.2 – 200 ng/mL
Dienogest	HPLC-MS/MS	Human Plasma EDTA	0.1 – 80 ng/mL
Drospirenone*	HPLC-MS/MS	Human Plasma EDTA	0.25 – 250 ng/mL
Enalapril*	HPLC-MS/MS	Human Plasma EDTA	0.2 – 100 ng/mL
Erythromycin	HPLC-MS/MS	Human Plasma EDTA	10 – 2500 ng/mL
Erlotinib	HPLC-MS/MS	Human Plasma EDTA	5 – 5000 ng/mL



Esomeprazole*	HPLC-MS/MS	Human Plasma EDTA	2.5 – 2500 ng/mL
Eslicarbazepine	HPLC-MS/MS	Human Plasma Heparin	100 – 20000 ng/mL
Estradiol	HPLC-MS/MS	Human Plasma Heparin	0.5 – 100 pg/mL
Estradiol	UPLC-MS/MS	Human Plasma EDTA	100 – 10000 pg/mL
Estrone	HPLC-MS/MS	Human Plasma Heparin	1 – 200 pg/mL
Estrone 3-sulfate	HPLC-MS/MS	Human Plasma Heparin	5 – 1500 pg/mL
Ethinyl Estradiol	HPLC-MS/MS	Human Plasma EDTA	1 – 500 pg/mL
Ethinyl Estradiol	HPLC-MS/MS	Human Plasma EDTA	2.5 – 500 pg/mL
Etodolac	HPLC-MS/MS	Human Plasma Na citrate	0.1 – 40 µg/mL
Ezetimibe	HPLC-MS/MS	Human Plasma EDTA	0.1 – 100 ng/mL
Flufenamic acid	HPLC-MS/MS	Human Plasma EDTA	1 – 100 ng/mL
(R)- and (S)-Flurbiprofen	HPLC-MS/MS	Human Plasma EDTA	25 – 2500 ng/mL
Flurbiprofen	HPLC-MS/MS	Buccopharyngeal lozenges/saliva	50 – 2000 ng/mL
Fluticasone propionate	HPLC-MS/MS	Human Plasma EDTA	5 – 1000 pg/mL
Fluvastatin*	HPLC-MS/MS	Human Plasma EDTA	0.5 – 500 ng/mL
Furosemide	HPLC-MS/MS	Human Plasma EDTA	10 – 2500 ng/mL
Ginkgolides (A and B)	HPLC-MS/MS	Human Plasma Heparin	0.2 - 50 ng/mL
Hydrochlorothiazide	HPLC-MS/MS	Human Plasma EDTA	1 – 300 ng/mL
Hydroxychloroquine	HPLC-MS/MS	Human Plasma EDTA	0.2 – 200 ng/mL



Imatinib	HPLC-MS/MS	Human Plasma EDTA	10 – 3000 ng/mL
Ibuprofen	HPLC-MS/MS	Human Plasma Heparin	0.1 – 20 µg/mL
(R)- and (S)-Ibuprofen	HPLC-MS/MS	Human Plasma Heparin	0.1 – 40 µg/mL
Ipratropium bromide	HPLC-MS/MS	Human Plasma EDTA	0.5 - 50 pg/mL
Ipratropium bromide	HPLC-MS/MS	Human Plasma EDTA	2 - 400 pg/mL
Irbesartan	HPLC-MS/MS	Human Plasma Heparin	20 – 10000 ng/mL
Ivermectine H2B1a	HPLC-MS/MS	Human Plasma EDTA	0.5 – 40 ng/mL
Ketoconazole*	HPLC-MS/MS	Human Plasma EDTA	20 – 2000 ng/mL
Ketoprofen	HPLC-MS/MS	Human Plasma Heparin	5 – 5000 ng/mL
Lansoprazole*	HPLC-MS/MS	Human Plasma EDTA	2 – 2000 ng/mL
Levonorgestrel	HPLC-MS/MS	Human Plasma EDTA	25 – 5000 pg/mL
Licarbazepine	HPLC-MS/MS	Human Plasma EDTA	100 – 20000 ng/mL
Loratadine	HPLC-MS/MS	Human Plasma EDTA	0.02 – 20 ng/mL
Lormetazepam	HPLC-MS/MS	Human Plasma EDTA	0.2 - 30 ng/mL
Lovastatin	HPLC-MS/MS	Human Plasma EDTA	0.02 – 20 ng/mL
Magnesium	ICP-MS	Human Plasma EDTA	10 - 1000 µg/mL
Melatonin	HPLC-MS/MS	Human Plasma EDTA	5 – 3000 pg/mL
Memantine*	HPLC-MS/MS	Human Plasma EDTA	0.1 – 100 ng/mL
4-Methylaminoantipyrine	HPLC-MS/MS	Human Plasma EDTA	0.2 - 30 µg/mL



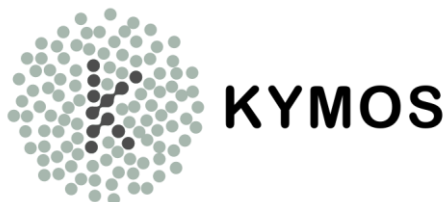
# KYMOS

Methylprednisone*	HPLC-MS/MS	Human Plasma EDTA	0.5 – 500 ng/mL
Metopimazine	HPLC-MS/MS	Human Plasma EDTA	0.2 – 60 ng/mL
Metronidazole	HPLC-MS/MS	Human Plasma EDTA	50 – 20000 ng/mL
Mometasone furoate	UPLC-MS/MS	Human Plasma EDTA	2 – 100 pg/mL
Moxifloxacin	HPLC-MS/MS	Human Plasma EDTA	10 – 5000 ng/mL
Naloxone*	HPLC-MS/MS	Human Plasma EDTA	0.025 – 25 ng/mL
Naproxen*	HPLC-MS/MS	Human Plasma Heparin	0.1 – 100 µg/mL
Norgestrel	HPLC-MS/MS	Human Plasma EDTA	0.05 – 50 ng/mL
Olmesartan	HPLC-MS/MS	Human Plasma EDTA	5 – 1800 ng/mL
Ondansetron*	HPLC-MS/MS	Human plasma EDTA	0.1 – 100 ng/mL
Octreotide	HPLC-MS/MS	Human Plasma EDTA	25 – 5000 pg/mL
Oxycodone	HPLC-MS/MS	Human Plasma EDTA	0.1 – 100 ng/mL
Pantoprazole*	HPLC-MS/MS	Human Plasma EDTA	2 – 2000 ng/mL
Paracetamol (acetaminophen)	HPLC-MS/MS	Human Plasma EDTA	0.1 – 20 µg/mL
Paroxetine*	HPLC-MS/MS	Human Plasma EDTA	0.1 – 20 ng/mL
Pazopanib	HPLC-MS/MS	Human Plasma EDTA	50 – 20000 ng/mL
Phenol	HPLC-MS/MS	Human Plasma Heparin	15 – 500 ng/mL
Phenylephrine*	HPLC-MS/MS	Human Plasma Heparin	0.1 – 100 ng/mL
Pravastatin*	HPLC-MS/MS	Human Plasma EDTA	0.5 – 500 ng/mL



# KYMOS

Prednisolone *	HPLC-MS/MS	Human Plasma EDTA	0.5 – 500 ng/mL
Pregabalin	HPLC-MS/MS	Human Plasma EDTA	50 – 15000 ng/mL
Progesterone	HPLC-MS/MS	Human Plasma EDTA	0.2 - 200 ng/mL
Progesterone	HPLC-MS/MS	Human Plasma EDTA	0.05 – 10 ng/mL
Pseudoephedrine *	HPLC-MS/MS	Human Plasma EDTA	0.5 – 500 ng/mL
Ranitidine	HPLC-MS/MS	Human Plasma EDTA	10 – 2000 ng/mL
Ranolazine*	HPLC-MS/MS	Human Plasma EDTA	2 – 2000 ng/mL
Rasagiline*	HPLC-MS/MS	Human Plasma EDTA	10 – 5000 pg/mL
Resveratrol and glucuronide	HPLC-MS/MS	Human Plasma EDTA	5 – 1000 ng/mL
Riluzole	HPLC-MS/MS	Human Plasma EDTA	0.5 – 500 ng/mL
Rivastigmine	HPLC-MS/MS	Human Plasma EDTA	0.1 – 30 ng/mL
Roflumilast	HPLC-MS/MS	Human Plasma EDTA	0.05 – 20 ng/mL
Rosuvastatin	HPLC-MS/MS	Human Plasma Heparin	0.04 – 40 ng/mL
Salbutamol	HPLC-MS/MS	Human Plasma EDTA	0.5 – 50 ng/mL
Salmeterol	HPLC-MS/MS	Human Plasma EDTA	5 – 2000 pg/mL
Simvastatin*	HPLC-MS/MS	Human plasma EDTA	50 – 5000 pg/mL
Solifenacin*	HPLC-MS/MS	Human Plasma EDTA	0.1 – 20 ng/mL
Spiramycin	HPLC-MS/MS	Human Plasma EDTA	10 – 1200 ng/mL
Strontium (ranelate)	GF-AAS	Human Plasma Heparin	100 – 4000 ng/mL



Sumatriptan*	HPLC-MS/MS	Human Plasma EDTA	0.1 – 100 ng/mL
Tadalafil	HPLC-MS/MS	Human Plasma EDTA	1 – 500 ng/mL
Telmisartan*	HPLC-MS/MS	Human plasma EDTA	2 – 1000 ng/mL
Testosterone	HPLC-MS/MS	Human Plasma Heparin	15 – 3000 pg/mL
Tramadol	HPLC-MS/MS	Human Plasma EDTA	0.5 – 250 ng/mL
Tungstate sodium	ICP-MS	Human Plasma Lithium heparin	150-6000 ng/mL
Trichloroethanol	GC/ $\mu$ -ECD	Human Plasma Heparin	10 – 100 ng/mL
Valsartan*	HPLC-MS/MS	Human Plasma EDTA	10 – 5000 ng/mL
Voriconazole*	HPLC-MS/MS	Human Plasma EDTA	10 – 5000 ng/mL

\* Methods under revision for instrumental upgrade or for fulfilment of new guideline requirements

...and many other proprietary methods of different therapeutic classes.