



## Cetero Research Bioanalytical Methods List

Houston // Toronto



## Newly Validated Bioanalytical Methods

Compound	Species	Matrix	Anticoagulant	LLOQ	Methodology	Therapeutic Area
3-Hydroxyquinidine	Human	Plasma	EDTA	0.1 ng/mL	LC-MS/MS	Cardiovascular
Atorvastatin/2-Hydroxy/4-Hydroxy	Human	Plasma	K2EDTA	0.050/0.050/0.0500 ng/mL	LC-MS/MS	Hypercholesterolemia
Atorvastatin/2-OH Atorvastatin/4-OH Atorvastatin	Human	Plasma	EDTA	0.05/0.05/0.05 ng/mL	LC-MS/MS	Cardiovascular
Bisoprolol	Human	Urine	N/A	20.0 ng/mL	LC-MS/MS	Antihypertensive
Diclofenac	Human	Plasma	EDTA	10 ng/mL	LC-MS/MS	Analgesic (NSAID)
Famotidine	Human	Plasma	EDTA	1.000 ng/mL	LC-MS/MS	GERD
Fexofenadine/Pseudoephedrine	Human	Plasma	EDTA	2/2 ng/mL	LC-MS/MS	Antihistamine
Gabapentin	Human	Plasma	EDTA	0.0200 µg/mL	LC-MS/MS	Anticonvulsant
Isradipine	Human	Plasma	EDTA	0.0500 ng/mL	LC-MS/MS	Cardiovascular
Mesalamine/N-Acetylmесalamine	Human	Plasma	EDTA	5/5 – 2000/2000 ng/mL	LC-MS/MS	Anti-inflammatory
Morphine/Morphine 6-glucuronide	Human	Plasma	EDTA	1.000/5.000 ng/mL	LC-MS/MS	Analgesic (Opioid)
Morphine/Morphine 6-glucuronide	Human	Plasma	EDTA	0.300 / 0.900 ng/mL	LC-MS/MS	Analgesic (Opioid)
Naltrexone/6-beta Naltrexol	Human	Plasma	EDTA	0.0200/0.200 ng/mL	LC-MS/MS	Opioid Receptor Antagonist
Naproxen (High Range)	Human	Plasma	EDTA	1.00 – 240 µg/mL	LC-MS/MS	Analgesic (NSAID)
O-Desmethylvenlafaxine	Human	Plasma	EDTA	2.0 ng/mL	LC-MS/MS	CNS (Depression)
Omeprazole	Human	Plasma	EDTA	1.000 ng/mL	LC-MS/MS	GERD
Phenylephrine (Free)	Human	Plasma	EDTA	5 pg/mL	LC-MS/MS	Nasal Decongestant
Phenylephrine (Total)	Human	Plasma	EDTA	1 ng/mL	LC-MS/MS	Nasal Decongestant
Pseudoephedrine	Human	Plasma	EDTA	1.000 ng/mL	LC-MS/MS	Decongestant
Quinidine/3-Hydroxyquinine	Human	Plasma	EDTA	0.5/0.1 ng/mL	LC-MS/MS	Cardiovascular
Ranolazine	Human	Plasma	K2EDTA	10.00 ng/mL	LC-MS/MS	Cardiovascular (Angina)
R-Modafinil/R-Modafinil Acid/Modafinil Sulfone	Human	Plasma	EDTA	0.0200 ng/mL	LC-MS/MS	CNS
Sildenafil/N-Desmethyl Sildenafil	Human	Plasma	EDTA	1/0.25 ng/mL	LC-MS/MS	Antihypertensive, Peripheral Vasodilator
Testosterone/Dihydrotestosterone	Human	Serum		1.000/0.05 ng/mL	LC-MS/MS	Steroid (Anabolic)

## Validated Bioanalytical Methods

Compound	Species	Matrix	Anticoagulant	LLOQ	Methodology	Therapeutic Area
1alpha, 25-Dihydroxy-vitamin D2	Human	Serum	N/A	1.00 pg/mL	LC-MS/MS	Vitamin
2,6-Xylidine (Lidocaine Metabolite)	Rabbit	Plasma	Na Heparin	5.00 ng/mL	LC-MS/MS	Anesthetic Metabolite
3-Hydroxyquinidine	Human	Plasma	EDTA	0.1 ng/mL	LC-MS/MS	Cardiovascular
4-Hydroxyphenyl Carvedilol	Human	Plasma	EDTA	0.100 ng/mL	LC-MS/MS	Antihypertensive
6-B-Naltrexol	Human	Plasma		10.0 pg/mL	LC-MS/MS	Opioid Antagonist
Abacavir	Human	Plasma	EDTA	5.00 ng/mL	LC-MS/MS	HIV / AIDS NRTI
Acamprosate	Human	Serum	N/A	0.5 ng/mL	LC-MS/MS	Ethanol Dependency

NEW

## Validated Bioanalytical Methods

Compound	Species	Matrix	Anticoagulant	LLOQ	Methodology	Therapeutic Area
Acarbose	Human	Plasma		0.250 ng/mL	LC-MS/MS	Antidiabetic
Acebutolol	Human	Plasma		5.00 ng/mL	LC-MS/MS	Cardiovascular
Acetaminophen	Human	Plasma		100 ng/mL	LC-MS/MS	Analgesic (NSAID)
Acetazolamide	Human	Plasma	EDTA	1.00 µg/mL	LC-MS/MS	Edema / Epilepsy
Acyclovir (High Range)	Human	Plasma		20.0 ng/mL	LC-MS/MS	HIV / AIDS Antiviral
Acyclovir (Low Range)	Human	Plasma	EDTA	10.0 ng/mL	LC-MS/MS	HIV / AIDS Antiviral
Albuterol	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	Asthma
Albuterol (Low Range)	Human	Plasma	EDTA	10.0 pg/mL	LC-MS/MS	Asthma
Alendronate	Human	Plasma		0.500 ng/mL	LC-MS/MS	Osteoporosis
Alendronate	Human	Urine	N/A	1.00 ng/mL	LC-MS/MS	Osteoporosis
Alfuzosin	Human	Plasma	EDTA	0.0500 ng/mL	LC-MS/MS	Benign Prostatic Hyperplasia (BPH)
Aliskiren	Human	Plasma	EDTA	1.00 ng/mL	LC-MS/MS	Antihypertensive
Almotriptan	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	Migraine
Alprazolam	Human	Plasma	EDTA	0.100 ng/mL	LC-MS/MS	Anti-anxiety
Amlodipine	Human	Plasma	EDTA	0.0500 ng/mL	LC-MS/MS	Antibiotic
Amoxicillin	Human	Plasma		0.200 µg/mL	LC-MS/MS	Antibiotic
Anagrelide	Human	Plasma		100 pg/mL	LC-MS/MS	Anti-thrombolytic
Anagrelide	Human	Plasma	EDTA	0.0500 ng/mL	LC-MS/MS	Anti-thrombolytic
Anastrozole	Human	Plasma		0.100 ng/mL	LC-MS/MS	Cancer (breast)
Aprepitant	Human	Plasma	EDTA	10.0 ng/mL	LC-MS/MS	Antiemetic (Chemotherapy)
Aripiprazole	Human	Plasma	EDTA	0.100 ng/mL	LC-MS/MS	Antipsychotic
Aripiprazole/Dehydroaripiprazole	Human	Plasma	EDTA	0.100/0.100 ng/mL	LC-MS/MS	Antipsychotic
Aripiprazole/Dehydroaripiprazole	Human	Plasma		1.01 / 0.879 ng/mL	LC-MS/MS	Antipsychotic
Aripiprazole/Dehydroaripiprazole	Human	Plasma		0.337 / 0.293 ng/mL	LC-MS/MS	Antipsychotic
Armodafinil	Human	Plasma	EDTA	.05 µg/mL	LC-MS/MS	Stimulant
Aspirin	Human	Plasma	NaF/Potassium Oxalate	2.00 ng/mL	LC-MS/MS	Analgesic (NSAID)
Atenolol	Human	Plasma		10.0 ng/mL	LC-MS/MS	Antihypertensive / Angina
Atenolol	Human	Whole Blood	N/A	10.0 ng/mL	LC-MS/MS	Antihypertensive / Angina
Atomoxetine	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	ADHD
NEW Atorvastatin/2-Hydroxy/4-Hydroxy	Human	Plasma	K2EDTA	0.050/0.050/0.0500 ng/mL	LC-MS/MS	Hypercholesterolemia
Atorvastatin/2-Hydroxy/4-Hydroxy	Human	Plasma	EDTA	0.100 / 0.100 / 0.0200 ng/mL	LC-MS/MS	Hypercholesterolemia
NEW Atorvastatin/2-OH Atorvastatin/ 4-OH Atorvastatin	Human	Plasma	EDTA	0.05/0.05/0.05 ng/mL	LC-MS/MS	Cardiovascular
Azithromycin (High Range)	Human	Plasma	EDTA	2.00 ng/mL	LC-MS/MS	Antibiotic
Azithromycin (Low Range)	Human	Plasma	EDTA	1.00 ng/mL	LC-MS/MS	Antibiotic

## Validated Bioanalytical Methods

NEW

Compound	Species	Matrix	Anticoagulant	LLOQ	Methodology	Therapeutic Area
Baclofen	Human	Plasma	EDTA	5.00 ng/mL	LC-MS/MS	Muscle Relaxant
Balsalazide	Human	Plasma	EDTA	1.00 ng/mL	LC-MS/MS	Ulcerative Colitis
Benazepril/Benazeprilat	Human	Plasma	EDTA	1.00 / 1.00 ng/mL	LC-MS/MS	Antihypertensive
Benazepril/Benazeprilat	Human	Plasma	EDTA	0.5/0.5 ng/mL	LC-MS/MS	Antihypertensive
Bendroflumethiazide	Human	Plasma	EDTA	0.100 ng/mL	LC-MS/MS	Antihypertensive
Bicalutamide (R) & (S)	Human	Plasma		10.0 / 1.00 ng/mL	LC-MS/MS	Cancer (prostate)
Bisoprolol	Human	Urine	N/A	20.0 ng/mL	LC-MS/MS	Antihypertensive
Bisoprolol	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	Antihypertensive
Bisoprolol	Human	Plasma	EDTA	1.00 ng/mL	LC-MS/MS	Antihypertensive
Bromocriptine	Human	Plasma	EDTA	15.0 pg/mL	LC-MS/MS	Parkinson's Disease
Buprenorphine/Norbuprenorphine	Human	Plasma	EDTA	100 / 50.0 pg/mL	LC-MS/MS	Analgesic (Opioid)
Buprenorphine/Norbuprenorphine (Low Range)	Human	Plasma	EDTA	25.0 / 20.0 pg/mL	LC-MS/MS	Analgesic (Opioid)
Bupropion/Hydroxybupropion	Human	Plasma		0.980 / 1.80 ng/mL	LC-MS/MS	Antidepressant
Bupropion/Hydroxybupropion/Threo Erythroamino Alcoholbupropion	Human	Plasma	EDTA	1.00 / 2.00 / 1.00 ng/mL	LC-MS/MS	Antidepressant
Cabergoline	Human	Plasma	EDTA	3.00 pg/mL	LC-MS/MS	Parkinson's Disease
Calcitriol	Human	Serum	N/A	20.0 pg/mL	LC-MS/MS	Hypocalcaemia
Candesartan	Human	Plasma	EDTA	1.00 ng/mL	LC-MS/MS	Antihypertensive
Candesartan	Human	Plasma		2.00 ng/mL	LC-MS/MS	Antihypertensive
Carbamazepine/Carbamazepine 10,11 Epoxide	Human	Plasma	EDTA	50.0 / 5.00 ng/mL	LC-MS/MS	Anticonvulsant
Carbidopa/Levodopa	Human	Plasma		4.00 / 20.0 ng/mL	LC-MS/MS	Parkinson's Disease
Carbinoxamine	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	Antihistamine
Carisoprodol/Meprobamate	Human	Plasma		25.00/25.00 ng/mL	LC-MS/MS	Muscle Relaxant
Carvedilol	Human	Plasma	EDTA		LC-MS/MS	Antihypertensive
Carvedilol/4-Hydroxyphenyl Carvedilol	Human	Plasma	EDTA	0.500 / 0.100 ng/mL	LC-MS/MS	Antihypertensive
Cefdinir	Human	Plasma	EDTA	10.0 ng/mL	LC-MS/MS	Antibiotic
Cefpodoxime	Human	Plasma		6.24 ng/mL	LC-MS/MS	Antibiotic
Cefpodoxime Proxetil	Human	Plasma		23.7 ng/mL	LC-MS/MS	Antibiotic
Cefprozil	Human	Plasma	EDTA	0.100 µg/mL	LC-MS/MS	Antibiotic
Celecoxib (Celebrex)	Human	Plasma		10.0 ng/mL	LC-MS/MS	Analgesic (NSAID)
Cetirizine	Human	Plasma	EDTA	5.00 ng/mL	LC-MS/MS	Antihistamine
Chlorthalidone	Human	Plasma	EDTA	.01 µg/mL	LC-MS/MS	Antihypertensive
Chlorthalidone/Torsemide	Human	Urine	N/A	0.0500 / 0.0500 µg/mL	LC-MS/MS	Antihypertensive
Cilazapril/Cilazaprilat	Human	Plasma	EDTA	0.200 / 0.200 ng/mL	LC-MS/MS	Antihypertensive
Cilostazol	Human	Plasma	EDTA	5.00 ng/mL	LC-MS/MS	Intermittent Claudication
Cinacalcet	Human	Plasma		0.0500 ng/mL	LC-MS/MS	Hyperparathyroidism
Ciprofloxacin	Human	Plasma	EDTA	10.0 ng/mL	LC-MS/MS	Antibiotic

## Validated Bioanalytical Methods

Compound	Species	Matrix	Anticoagulant	LLOQ	Methodology	Therapeutic Area
Citalopram	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	Antidepressant
Citalopram	Human	Plasma		0.380 ng/mL	LC-MS/MS	Antidepressant
Citalopram (S) & (R)	Human	Plasma	EDTA	0.200/0.200 ng/mL	LC-MS/MS	Antidepressant
Clarithromycin	Human	Plasma	EDTA	5.00 ng/mL	LC-MS/MS	Antibiotic
Clarithromycin/14-(R)-Hydroxyclearithromycin	Human	Plasma		11.4 / 7.59 ng/mL	LC-MS/MS	Antibiotic
Clarithromycin/14-Hydroxyclearithromycin	Human	Plasma		5.00 / 1.25 ng/mL	LC-MS/MS	Antibiotic
Clindamycin	Human	Plasma		0.200 ng/ mL	LC-MS/MS	Antibiotic
Clindamycin	Rabbit	Rabbit Plasma	EDTA	1.00 ng/mL	LC-MS/MS	Antibiotic
Clindamycin (Low Range)	Human	Plasma	EDTA	0.02 ng/mL	LC-MS/MS	Antibiotic
Clonazepam	Human	Plasma	EDTA	0.0500 ng/mL	LC-MS/MS	Anti-anxiety
Clonidine	Human	Plasma	EDTA	0.0100 ng/mL	LC-MS/MS	Antihypertensive
Clopidogrel	Human	Plasma		5.00 pg/mL	LC-MS/MS	Anti-platelet
Clopidogrel Acid	Human	Plasma		5.00 ng/mL	LC-MS/MS	Anti-platelet
Clozapine/Clozapine N-Oxide/ N-Desmethylclozapine	Human	Plasma	EDTA	40.0 / 20.0 / 20.0 ng/mL	LC-MS/MS	Antipsychotic
Clozapine/Clozapine N-Oxide/ Normethylclozapine	Human	Plasma	EDTA	4.00 / 2.00 / 2.00 ng/mL	LC-MS/MS	Antipsychotic
Codeine and Chlorpheniramine	Human	Plasma	EDTA	0.200/0.200 ng/mL	LC-MS/MS	Analgesic (Opioid) / Antihistamine
Cyclobenzaprine	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	Muscle Relaxant
Danazol	Human	Plasma	EDTA	1.0 ng/mL	LC-MS/MS	Endometriosis
Darifenacin	Human	Plasma		0.05 pg/mL	LC-MS/MS	Incontinence
Darifenacin	Human	Plasma	EDTA	25.0 pg/mL	LC-MS/MS	Incontinence
Darifenacin (High Range)	Human	Plasma	EDTA	0.05 ng/mL	LC-MS/MS	Incontinence
Deoxycholic Acid	Human	Plasma	EDTA	50.0 ng/mL	LC-MS/MS	
Descarboethoxyloratadine/ 3-Hydroxydesloratadine	Human	Plasma	EDTA	0.0500 / 0.0500 ng/ mL	LC-MS/MS	Antihistamine
Desipramine/2-Hydroxydesipramine	Human	Plasma	Na Heparin	0.250 / 0.250 ng/mL	LC-MS/MS	Antidepressant
Dexlansoprazole	Human	Plasma	EDTA	20.0 ng/mL	LC-MS/MS	GERD
Dexmethyl/methylphenidate	Human	Plasma		0.0509 ng/mL	LC-MS/MS	ADHD
Dextromethorphan/Dextrorphan	Human	Plasma	EDTA	10.0/10.0 pg/mL	LC-MS/MS	Anti-tussive
DHA/EPA Free	Human	Plasma		20.0 - 4000 ng/mL	LC-MS/MS	
DHA/EPA Total (High Range)	Human	Plasma		2.000/1.000 ug/mL	LC-MS/MS	
Diazepam/N-Desmethyldiazepam	Human	Plasma	EDTA	2.00 / 0.500 ng/mL	LC-MS/MS	Anti-anxiety
Diclofenac	Human	Plasma	EDTA	10 ng/mL	LC-MS/MS	Analgesic (NSAID)
Diclofenac	Human	Plasma	EDTA	0.500 ng/mL	LC-MS/MS	Analgesic (NSAID)
Diclofenac	Human	Plasma	EDTA	30.0 pg/mL	LC-MS/MS	Analgesic (NSAID)
Diclofenac	Human	Plasma	EDTA	10.0 ng/mL	LC-MS/MS	Analgesic (NSAID)
Diclofenac (Low range)	Human	Plasma		10.0-5000 pg/mL	LC-MS/MS	Analgesic (NSAID)

NEW

## Validated Bioanalytical Methods

Compound	Species	Matrix	Anticoagulant	LLOQ	Methodology	Therapeutic Area
Digoxin	Human	Plasma	EDTA	0.0500 ng/mL	LC-MS/MS	Atrial Fibrillation
Digoxin	Human	Urine	N/A	0.500 ng/mL	LC-MS/MS	Atrial Fibrillation
Diltiazem/ Desacetyldiltiazem/ N-Desmethyldiltiazem	Human	Plasma	EDTA	1.50/0.500/0.500 ng/mL	LC-MS/MS	Antihypertensive
Diltiazem/Desacetyl/Desmethyl	Human	Plasma	EDTA	1.00 / 0.500 / 0.500 ng/mL	LC-MS/MS	Antihypertensive
Diphenhydramine	Human	Plasma	EDTA	0.500 ng/mL	LC-MS/MS	Antihistamine
Diphenhydramine and Nordiphenhydramine	Human	Plasma	EDTA	1.00/ 0.25 ng/mL	LC-MS/MS	Antihistamine
Dipyridamole	Human	Plasma	EDTA	5.00 ng/mL	LC-MS/MS	Anti-thrombolytic
Disulfiram Metabolite	Human	Plasma	EDTA	1.00 ng/mL	LC-MS/MS	Alcoholism
D-Methylphenidate	Human	Plasma	EDTA	0.100 ng/mL	LC-MS/MS	ADHD
Donepezil	Human	Plasma		0.100 ng/mL	LC-MS/MS	Alzheimer's disease
Doxazosin	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	Antihypertensive
Doxycycline	Human	Plasma	EDTA	0.0500 µg/mL	LC-MS/MS	Antibiotic
Duloxetine	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	Antidepressant
Dutasteride	Human	Plasma		0.05 – 10.0 ng/mL	LC-MS/MS	Benign Prostatic Hyperplasia (BPH)
Efavirenz	Human	Plasma	EDTA	10.0 ng/mL	LC-MS/MS	HIV/AIDS Antiretroviral
Entacapone	Human	Plasma	EDTA	5.00 ng/mL	LC-MS/MS	Parkinson's Disease
Entacapone (E Isomer)	Human	Plasma	EDTA	5.00 ng/mL	LC-MS/MS	Parkinson's Disease
Eprosartan	Human	Plasma		5.00 ng/mL	LC-MS/MS	Antihypertensive
Escitalopram	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	Antidepressant
Esomeprazole	Human	Plasma	EDTA	2.00 ng/mL	LC-MS/MS	GERD
Estradiol Valerate	Human	Plasma		5.00 – 300.0 pg/mL	LC-MS/MS	
Eszopiclone	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	Sedative
Ethionamide	Human	Plasma		20.0 ng/mL	LC-MS/MS	Antibiotic
Exemestane	Human	Plasma	EDTA	0.0500 ng/mL	LC-MS/MS	Cancer (breast)
Ezetimibe Glucuronide	Human	Plasma	EDTA	2.00 ng/mL	LC-MS/MS	Hypercholesterolemia
Famciclovir/ Monodesacetylfamciclovir	Human	Plasma		0.0200 / 0.200 ng/mL	LC-MS/MS	Antiviral (Herpes)
Famciclovir/Penciclovir	Human	Plasma		10.4 ng/mL	LC-MS/MS	Antiviral (Herpes)
<b>NEW</b> Famotidine	Human	Plasma	EDTA	1.000 ng/mL	LC-MS/MS	GERD
Famotidine	Human	Plasma	EDTA	1.00 ng/mL	LC-MS/MS	GERD
Felodipine	Human	Plasma	EDTA	0.0500 ng/mL	LC-MS/MS	Antihypertensive
Fenofibric Acid	Human	Plasma		0.0200 – 20 µg/mL	LC-MS/MS	Hypercholesterolemia
Fentanyl	Human	Plasma	EDTA	10.0 pg/mL	LC-MS/MS	Analgesic (Opioid)
Fexofenadine	Human	Plasma		2.00 ng/mL	LC-MS/MS	Antihistamine
<b>NEW</b> Fexofenadine/Pseudoephedrine	Human	Plasma	EDTA	2/2 ng/mL	LC-MS/MS	Antihistamine
Finasteride	Human	Plasma		0.100 ng/mL	LC-MS/MS	Benign Prostatic Hyperplasia (BPH)

## Validated Bioanalytical Methods

Compound	Species	Matrix	Anticoagulant	LLOQ	Methodology	Therapeutic Area
Finasteride	Human	Plasma		0.0466 ng/mL	LC-MS/MS	Benign Prostatic Hyperplasia (BPH)
Flecainide	Human	Plasma		1.00 ng/mL	LC-MS/MS	Tachycardia
Fluoxetine	Human	Plasma	EDTA	25 pg/mL	LC-MS/MS	Antidepressant
Fluoxetine	Human	Serum	N/A	25 pg/mL	LC-MS/MS	Antidepressant
Fluoxetine/Norfluoxetine	Human	Plasma	EDTA	0.500 / 0.500 ng/mL	LC-MS/MS	Antidepressant
Fluoxetine/Olanzapine	Human	Plasma	EDTA	0.100 / 0.100 ng/mL	LC-MS/MS	Antidepressant
Fluticasone Propionate (Inhalation)	Human	Plasma		0.843 pg/mL	LC-MS/MS	Asthma
Fluticasone Propionate (Nasal Spray)	Human	Plasma		0.843 pg/mL	LC-MS/MS	Asthma
Fluvastatin	Human	Plasma	EDTA	1.00 ng/mL	LC-MS/MS	Cholesterol
Fluvoxamine	Human	Plasma	EDTA	0.500 ng/mL	LC-MS/MS	Antidepressant
Fosinopril/Fosinoprilat	Human	Plasma		5.00 / 5.00 ng/mL	LC-MS/MS	Antihypertensive
Furosemide	Human	Plasma	EDTA	20.0 ng/mL	LC-MS/MS	Edema
Gabapentin	Human	Plasma	EDTA	0.0200 µg/mL	LC-MS/MS	Anticonvulsant
Galantamine	Human	Plasma		0.500 ng/mL	LC-MS/MS	Alzheimer's disease
Galantamine	Human	Plasma		1.00 ng/mL	LC-MS/MS	Alzheimer's disease
Gatifloxacin	Human	Plasma	EDTA	40.0 ng/mL	LC-MS/MS	Antibiotic
Gemfibrozil	Human	Plasma	EDTA	0.0500 µg/mL	LC-MS/MS	Hyperlipidemia / Hypertriglyceridemia
Glimepiride	Human	Plasma	EDTA	2.00 ng/mL	LC-MS/MS	Anti-hyperglycemic
Glimepiride	Human	Plasma		1.20 ng/mL	LC-MS/MS	Anti-hyperglycemic
Glipizide	Human	Plasma	EDTA	2.00 ng/mL	LC-MS/MS	Anti-hyperglycemic
Glyburide	Human	Plasma	EDTA	2.00 ng/mL	LC-MS/MS	Anti-hyperglycemic
Glyburide/Metformin	Human	Plasma		2.00 / 20.0 ng/mL	LC-MS/MS	Anti-hyperglycemic
Glycopyrrolate	Human	Plasma	EDTA	0.0200 ng/mL	LC-MS/MS	Gastrointestinal
Griseofulvin	Human	Plasma		7.06 ng/mL	LC-MS/MS	Antifungal
Guaifenesin	Human	Plasma	EDTA	5.00 ng/mL	LC-MS/MS	Expectorant
Guanfacine	Human	Plasma	EDTA	.05 ng/mL	LC-MS/MS	ADHD
Guanfacine	Human	Plasma	EDTA	50 pg/mL	LC-MS/MS	ADHD
Haloperidol	Human	Plasma	EDTA	0.0500 ng/mL	LC-MS/MS	Antipsychotic
Hydrochlorothiazide (Low Dose)	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	Antihypertensive
Hydrocodone	Human	Plasma	Na Heparin	0.100 ng/mL	LC-MS/MS	Analgesic (Opioid)
Hydrocodone/Chlorpheniramine	Human	Plasma	EDTA	0.100 / 0.200 ng/mL	LC-MS/MS	Analgesic (Opioid)
Hydromorphone	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	Analgesic (Opioid)
Hydromorphone (Low Range)	Human	Plasma	EDTA	50.0 pg/mL	LC-MS/MS	Analgesic (Opioid)
Hydroxychloroquine	Human	Whole Blood	N/A	2.00 ng/mL	LC-MS/MS	Anti-malarial
Hydroxyurea	Human	Plasma	EDTA	0.500 µg/mL	LC-MS/MS	Anti-neoplastic (Sickle Cell / AIDS)
Ibandronate	Human	Plasma		0.200 ng/mL	LC-MS/MS	Osteoporosis
Ibandronate	Human	Serum	N/A	0.200 ng/mL	LC-MS/MS	Osteoporosis
Ibuprofen	Human	Plasma	EDTA	0.200 µg/mL	LC-MS/MS	Analgesic (NSAID)

NEW

## Validated Bioanalytical Methods

NEW

Compound	Species	Matrix	Anticoagulant	LLOQ	Methodology	Therapeutic Area
Imipramine/Desipramine	Human	Plasma	EDTA	0.500 / 0.500 ng/mL	LC-MS/MS	Antidepressant
Indinavir	Human	Plasma		0.0100 µg/mL	LC-MS/MS	Antiretroviral
Indomethacin	Human	Plasma	EDTA	20.0 ng/mL	LC-MS/MS	Analgesic (NSAID)
Irbesartan	Human	Plasma		5.00 ng/mL	LC-MS/MS	Antihypertensive
Isradipine	Human	Plasma	EDTA	0.0500ng/mL	LC-MS/MS	Cardiovascular
Itraconazole/2-Hydroxyitraconazole	Human	Plasma		1.00 / 2.00 ng/mL	LC-MS/MS	Antihypertensive
Lamivudine/Zidovudine	Human	Plasma	EDTA	6.00 / 6.00 ng/mL	LC-MS/MS	Antiretroviral (HIV/AIDS)
Lamotrigine	Human	Plasma	EDTA	100 ng/mL	LC-MS/MS	Anticonvulsant
Lamotrigine	Human	Plasma	EDTA	5.00 ng/mL	LC-MS/MS	Anticonvulsant
Lamotrigine (Low Range)	Human	Plasma		5.000 ng/mL	LC-MS/MS	Anticonvulsant
Lansoprazole	Human	Plasma	EDTA	2.00 ng/mL	LC-MS/MS	GERD
Lansoprazole (Low Range)	Human	Plasma	EDTA	0.250 ng/mL	LC-MS/MS	GERD
Leflunomide Metabolite	Human	Plasma	EDTA	5.00 ng/mL	LC-MS/MS	Rheumatoid Arthritis
Leflunomide Metabolite (High Range)	Human	Plasma	EDTA	0.25 µg/mL	LC-MS/MS	Rheumatoid Arthritis
Lesdexamfetamine and D-Amphetamine	Human	Plasma	EDTA	0.500/1.00 ng/mL	LC-MS/MS	Stimulant (ADHD)
Letrozole	Human	Plasma	EDTA	500 pg/mL	LC-MS/MS	Cancer (Breast)
Levetiracetam	Human	Plasma		50.0 ng/mL	LC-MS/MS	Anticonvulsant
Levetiracetam	Human	Plasma	EDTA	0.500 µg/mL	LC-MS/MS	Anticonvulsant
Levetiracetam (Low Range)	Human	Plasma	EDTA	0.0500 µg/mL	LC-MS/MS	Anticonvulsant
Levodopa/Carbidopa	Human	Plasma	EDTA	20.0 / 4.00 ng/mL	LC-MS/MS	Parkinson's Disease
Levodopa/Carbidopa	Human	Plasma		10.0 / 2.00 ng/mL	LC-MS/MS	Parkinson's Disease
Levofloxacin	Human	Plasma	EDTA	0.0500 µg/mL	LC-MS/MS	Antibiotic
Levorphanol	Human	Plasma	Na Heparin	0.100 ng/mL	LC-MS/MS	Analgesic (Opioid)
Levothyroxine	Human	Plasma		10 – 300 ng/mL	LC-MS/MS	Hypothyroidism
Lidocaine	Rabbit	plasma	Na Heparin	50.0 ng/mL	LC-MS/MS	Anesthetic
Lidocaine (Low Range)	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	Anesthetic
Lidocaine/Prilocaine	Human	Plasma	EDTA	0.500 / 0.250 ng/mL	LC-MS/MS	Anesthetic
Linezolid	Human	Plasma	EDTA	0.100 µg/mL	LC-MS/MS	Antibiotic
Lisinopril	Human	Plasma	EDTA	1.00 ng/mL	LC-MS/MS	Antibiotic
L-Methylphenidate	Human	Plasma	EDTA	0.02 ng/mL	LC-MS/MS	ADHD
Loperamide	Human	Plasma	EDTA	0.05 ng/mL	LC-MS/MS	Diarrhea
Loratadine/Descarboethoxyloratadine	Human	Plasma		0.0400 / 0.0400 ng/mL	LC-MS/MS	Antihistamine
Loratadine/Descarboethoxyloratadine/Pseudoephedrine	Human	Plasma	EDTA	0.040/ 0.040/2.0 ng/mL	LC-MS/MS	Antihistamine
Lorazepam	Human	Plasma	EDTA	0.500 ng/mL	LC-MS/MS	Anti-anxiety
Losartan/Carboxy Acid	Human	Plasma	EDTA	2.00 / 2.00 ng/mL	LC-MS/MS	Antihypertensive
Lovastatin/Acid Metabolite	Human	Plasma	EDTA	0.100 / 0.100 ng/mL	LC-MS/MS	Hypercholesterolemia

## Validated Bioanalytical Methods

NEW

NEW  
NEW

Compound	Species	Matrix	Anticoagulant	LLOQ	Methodology	Therapeutic Area
Meloxicam	Human	Plasma	EDTA	0.01 µg/mL	LC-MS/MS	Analgesic (NSAID)
Meloxicam	Human	Plasma		25.4 ng/mL	LC-MS/MS	Analgesic (NSAID)
Memantine	Human	Plasma	EDTA	0.100 ng/mL	LC-MS/MS	Alzheimer's disease
Mesalamine	Human	Plasma	EDTA	5.00 ng/mL	LC-MS/MS	Anti-inflammatory
Mesalamine	Human	Plasma		2.00 – 1375 ng/mL	LC-MS/MS	Anti-inflammatory
Mesalamine (Low Range)	Human	Plasma	EDTA	2.00 ng/mL	LC-MS/MS	Anti-inflammatory
Mesalamine/N-Acetylmесalamine	Human	Plasma	EDTA	5/5 – 2000/2000 ng/mL	LC-MS/MS	Anti-inflammatory
Metaxalone	Human	Plasma	EDTA	10.0 ng/mL	LC-MS/MS	Muscle Relaxant
Metformin	Human	Plasma	EDTA	10.0 ng/mL	LC-MS/MS	Anti-hyperglycemic
Metformin	Human	Plasma		20.0 ng/mL	LC-MS/MS	Anti-hyperglycemic
Methazolamide	Human	Plasma	EDTA	0.05 µg/mL	LC-MS/MS	Glaucoma
Methazolamide	Human	Whole Blood	N/A	500 ng/mL	LC-MS/MS	Glaucoma
Methazolamide	Human	Whole Blood	N/A	0.200 µg/mL	LC-MS/MS	Glaucoma
Methimazole	Human	Plasma		5.0 – 500.0 ng/mL	LC-MS/MS	Hyperthyroidism
Methylphenidate	Human	Plasma	EDTA	0.100 ng/mL	LC-MS/MS	ADHD
Methylprednisolone	Human	Plasma	EDTA	2.00 ng/mL	LC-MS/MS	Anti-inflammatory
Metoclopramide	Human	Plasma	EDTA	0.500 ng/mL	LC-MS/MS	Antiemetic
Metoclopramide (Low Range)	Human	Plasma	EDTA	0.100 ng/mL	LC-MS/MS	Antiemetic
Metolazone	Human	Plasma		0.400 ng/mL	LC-MS/MS	Antihypertensive
Metoprolol	Human	Plasma	EDTA	0.300 ng/mL	LC-MS/MS	Antihypertensive
Metoprolol	Human	Plasma		0.0935 ng/mL	LC-MS/MS	Antihypertensive
Metronidazole	Human	Plasma	EDTA	0.500 ng/mL	LC-MS/MS	Antibiotic
Metronidazole	Human	Plasma		106 ng/mL	LC-MS/MS	Antibiotic
Midazolam and 1-Hydroxymidazolam	Human	Plasma	EDTA	0.100/ 0.100 ng/mL	LC-MS/MS	Muscle Relaxant
Midodrine/ST-1059	Human	Plasma	EDTA	0.500 / 0.500 ng/mL	LC-MS/MS	Anti-hypotensive
Minocycline	Human	Plasma	EDTA	20.0 ng/mL	LC-MS/MS	Antibiotic
Mirtazapine	Human	Plasma	EDTA	0.250 ng/mL	LC-MS/MS	Antidepressant
Misoprostol Acid	Human	Plasma	EDTA	5.00 pg/mL	LC-MS/MS	Labor Induction / Ulcer prevention
Mitoxantrone	Human	Plasma	EDTA	0.100 ng/mL	LC-MS/MS	Anti-neoplastic
Modafinil	Human	Plasma	EDTA	.02 µg/mL	LC-MS/MS	Analeptic
Moexipril/Moexiprilat	Human	Plasma	EDTA	0.200 / 0.200 ng/mL	LC-MS/MS	Antihypertensive
Montelukast	Human	Plasma	EDTA	2.00 ng/mL	LC-MS/MS	Leukotriene Receptor Agonist (LTRA)
Morphine	Human	Plasma		0.500 ng/mL	LC-MS/MS	Analgesic (Opioid)
Morphine/Morphine 6-Glucuronide	Human	Plasma	EDTA	1.000/5.000 ng/mL	LC-MS/MS	Analgesic (Opioid)
Morphine/Morphine 6-Glucuronide	Human	Plasma	EDTA	0.300 / 0.900 ng/mL	LC-MS/MS	Analgesic (Opioid)
Morphine/Morphine 6-Glucuronide (Low Range)	Human	Plasma		0.050/0.300 – 10.0/60.0 ng/mL	LC-MS/MS	Analgesic (Opioid)
Moxifloxacin	Human	Plasma	EDTA	40.0 ng/mL	LC-MS/MS	Antibiotic

## Validated Bioanalytical Methods

Compound	Species	Matrix	Anticoagulant	LLOQ	Methodology	Therapeutic Area
Mycophenolate Mofetil	Human	Plasma	EDTA	20.0 pg/mL	LC-MS/MS	Immunosuppressant
Mycophenolate Mofetil	Human	Plasma		46.55 ng/mL	LC-MS/MS	Immunosuppressant
Mycophenolic Acid	Human	Plasma	EDTA	20.0 ng/mL	LC-MS/MS	Immunosuppressant
Nabumetone Metabolite	Human	Plasma	EDTA	0.500 µg/mL	LC-MS/MS	Analgesic (NSAID)
Nadolol	Human	Plasma	EDTA	1.00 ng/mL	LC-MS/MS	Antihypertensive
Naloxone	Human	Plasma	EDTA	10.0 pg/mL	LC-MS/MS	Opioid Receptor Competitive Antagonist
Naloxone (Low Range)	Human	Plasma	EDTA	2.00 pg/mL	LC-MS/MS	Opioid Receptor Competitive Antagonist
Naloxone (Total)	Human	Plasma	EDTA	0.05 ng/mL	LC-MS/MS	Opioid Receptor Competitive Antagonist
Naltrexone	Human	Plasma		5.00 - 4000 pg/mL	LC-MS/MS	Opioid Receptor Antagonist
<b>NEW</b> Naltrexone/6-beta Naltrexol	Human	Plasma	EDTA	0.0200/0.200 ng/mL	LC-MS/MS	Opioid Receptor Antagonist
<b>NEW</b> Naproxen	Human	Plasma	EDTA	1.00 µg/mL	LC-MS/MS	Analgesic (NSAID)
<b>NEW</b> Naproxen (High Range)	Human	Plasma	EDTA	1.00 – 240 µg/mL	LC-MS/MS	Analgesic (NSAID)
Naratriptan	Human	Plasma	EDTA	0.075 ng/mL	LC-MS/MS	Migraines
Nateglinide	Human	Plasma	EDTA	0.0500 µg/mL	LC-MS/MS	Anti-hyperglycemic
Nevirapine	Human	Plasma	EDTA	5.00 ng/mL	LC-MS/MS	Antiretroviral
Niacin/Nicotinic Acid	Human	Plasma	EDTA	20.0 / 20.0 ng/mL	LC-MS/MS	Hypercholesterolemia
Nifedipine	Human	Plasma	EDTA	0.500 ng/mL	LC-MS/MS	Antihypertensive
Nifedipine	Human	Plasma		0.184 ng/mL	LC-MS/MS	Antihypertensive
Nifedipine (high conc.)	Human	Plasma		0.566 ng/mL	LC-MS/MS	Antihypertensive
Nimodipine	Human	Plasma	EDTA	0.100 ng/mL	LC-MS/MS	Antihypertensive
Nisoldipine	Human	Plasma	EDTA	0.05 ng/mL	LC-MS/MS	Antihypertensive
Nitrofurantoin	Human	Plasma		5.00 ng/mL	LC-MS/MS	Antibiotic
Nitrofurantoin	Human	Plasma		10.0 ng/mL	LC-MS/MS	Antibiotic
<b>NEW</b> O-Desmethylvenlafaxine	Human	Plasma	EDTA	2.0 ng/mL	LC-MS/MS	CNS (Depression)
Olanzapine	Human	Plasma	EDTA	0.100 ng/mL	LC-MS/MS	Antipsychotic
Olmesartan	Human	Plasma		10.0 ng/mL	LC-MS/MS	Antihypertensive
Olsalazine	Human	Plasma	EDTA	2.00 ng/mL	LC-MS/MS	Anti-inflammatory
Olsalazine (High Range)	Human	Plasma	EDTA	10.0 ng/mL	LC-MS/MS	Anti-inflammatory
<b>NEW</b> Omeprazole	Human	Plasma	EDTA	1.000 ng/mL	LC-MS/MS	GERD
Omeprazole	Human	Plasma	EDTA	2.00 ng/mL	LC-MS/MS	GERD
Ondansetron	Human	Plasma	EDTA	0.500 ng/mL	LC-MS/MS	Antiemetic
Oxandrolone	Human	Plasma	EDTA	0.250 ng/mL	LC-MS/MS	Steroid (Anabolic)
Oxaprozin	Human	Plasma		1.00 µg/mL	HPLC	Steroid (Anabolic)
Oxcarbazepine/ Hydroxyoxcarbazepine	Human	Plasma	EDTA	0.00500 / 0.0500 µg/mL	LC-MS/MS	Anticonvulsant

## Validated Bioanalytical Methods

Compound	Species	Matrix	Anticoagulant	LLOQ	Methodology	Therapeutic Area
Oxybutynin/N-Desethyloxybutynin	Human	Plasma	EDTA	0.100 / 0.200 ng/mL	LC-MS/MS	Anti-cholinergic
Oxycodone	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	Analgesic (Opioid)
Oxymorphone/ 6-B-Hydroxyoxymorphone	Human	Plasma	EDTA	0.0500 / 0.0500 ng/ mL	LC-MS/MS	Analgesic (Opioid)
Oxymorphone/6-B- Hydroxyoxymorphone (Low Range)	Human	Plasma	EDTA	0.02/0.02 ng/mL	LC-MS/MS	Analgesic (Opioid)
Paliperidone (9-Hydroxyrisperidone)/Risperidone	Human	Plasma		0.05 / 0.05 ng/mL	LC-MS/MS	Antipsychotic
Pantoprazole	Human	Plasma	EDTA	2.00 ng/mL	LC-MS/MS	GERD
Paricalcitol	Human	Plasma		10.0 pg/mL	LC-MS/MS	Hyperparathyroidism
Paricalcitol (High Range)	Human	Plasma		10.0 – 500.0 pg/mL	LC-MS/MS	Hyperparathyroidism
Paroxetine	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	Antidepressant
Penciclovir	Human	Plasma		20.0 ng/mL	LC-MS/MS	Antiviral
Perindopril/Perindoprilat	Human	Plasma	EDTA	0.500 / 0.250 ng/mL	LC-MS/MS	Antihypertensive
Phentermine	Human	Plasma	EDTA	1.00 ng/mL	LC-MS/MS	Appetite Suppressant
<b>NEW</b> Phenylephrine (Free)	Human	Plasma	EDTA	5 pg/mL	LC-MS/MS	Respiratory
<b>NEW</b> Phenylephrine (Total)	Human	Plasma	EDTA	1 ng/mL	LC-MS/MS	Respiratory
Phenytoin	Human	Plasma		20.0 ng/mL	LC-MS/MS	Antiepileptic
Phenytoin	Human	Plasma		5.69 ng/mL	LC-MS/MS	Antiepileptic
Pioglitazone/Hydroxyglitazone	Human	Plasma	EDTA	10.0 / 5.00 ng/mL	LC-MS/MS	Anti-hyperglycemic
Pramipexole	Human	Plasma	EDTA	0.015 ng/mL	LC-MS/MS	Parkinson's Disease
Pramipexole	Human	Plasma	EDTA	0.025 ng/mL	LC-MS/MS	Parkinson's Disease
Pramipexole	Human	Whole Blood	N/A	25.0 pg/mL	LC-MS/MS	Parkinson's Disease
Pravastatin	Human	Plasma	EDTA	0.400 ng/mL	LC-MS/MS	Hypercholesterolemia
Pregabalin	Human	Plasma	EDTA	0.02 µg/mL	LC-MS/MS	Anticonvulsants
Promethazine	Human	Plasma	EDTA	0.500 ng/mL	LC-MS/MS	Antihistamine
Propafenone/5-Hydroxypropafenone	Human	Plasma	EDTA	0.100 / 0.100 ng/mL	LC-MS/MS	Anti-arrhythmic
Propafenone/5-Hydroxypropafenone	Human	Plasma		0.200 / 0.100 ng/mL	LC-MS/MS	Anti-arrhythmic
Propafenone/ 5-Hydroxypropafenone/ N-Despropylpropafenone	Human	Plasma	EDTA	0.500 / 0.500 / 0.250 ng/mL	LC-MS/MS	Anti-arrhythmic
Propranolol	Human	Plasma	EDTA	2.00 ng/mL	LC-MS/MS	Antihypertensive
Propranolol/4-Hydroxypropranolol	Human	Plasma	EDTA	2.00 / 1.00 ng/mL	LC-MS/MS	Antihypertensive
Propranolol/4-Hydroxypropranolol (Total)	Human	Plasma	EDTA	2.00 / 1.00 ng/mL	LC-MS/MS	Antihypertensive
<b>NEW</b> Pseudoephedrine	Human	Plasma	EDTA	1.000 ng/mL	LC-MS/MS	Decongestant
Pseudoephedrine	Human	Plasma		2.00 ng/mL	LC-MS/MS	Decongestant
Quetiapine (Low Range)	Human	Plasma	EDTA	1.50 ng/mL	LC-MS/MS	Antipsychotic
Quetiapine/ N-Dealkylatedquetiapine	Human	Plasma	EDTA	10.0/0.323 ng/mL	LC-MS/MS	Antipsychotic
Quinapril/Quinaprilat	Human	Plasma		1.00 / 3.00 ng/mL	LC-MS/MS	Antihypertensive
<b>NEW</b> Quinidine/3-Hydroxyquinine	Human	Plasma	EDTA	0.5/0.1 ng/mL	LC-MS/MS	Cardiovascular

## Validated Bioanalytical Methods

NEW

NEW

NEW

Compound	Species	Matrix	Anticoagulant	LLOQ	Methodology	Therapeutic Area
Rabeprazole	Human	Plasma		2.50 ng/mL	LC-MS	GERD
Rabeprazole	Human	Plasma	EDTA	2.00 ng/mL	LC-MS/MS	GERD
Rabeprazole	Human	Plasma		3.62 ng/mL	LC-MS/MS	GERD
Raloxifene	Human	Plasma	EDTA	.02 ng/mL	LC-MS/MS	Osteoporosis
Raloxifene 6 and 4'-Glucuronide	Human	Plasma	EDTA	0.500/4.00 ng/mL	LC-MS/MS	Osteoporosis
Ramipril /Ramiprilat	Human	Plasma	EDTA	0.0500 / 0.100 ng/mL	LC-MS/MS	Antihypertensive
Ramipril /Ramiprilat	Human	Plasma		0.05/0.3 ng/mL	LC-MS/MS	Antihypertensive
Ranolazine	Human	Plasma	K2EDTA	10.00 ng/mL	LC-MS/MS	Cardiovascular (Angina)
Repaglinide	Human	Plasma	EDTA	0.250 ng/mL	LC-MS/MS	Anti-hyperglycemic
Rhein	Human	Plasma		20.0 ng/mL	LC-MS/MS	Antibacterial
Ribavirin	Human	Plasma	EDTA	10.0 ng/mL	LC-MS/MS	Antiviral
Ribavirin (High Range)	Human	Plasma	EDTA	20.0 ng/mL	LC-MS/MS	Antiviral
Ribavirin (Low Range)	Human	Plasma	EDTA	1.00 ng/mL	LC-MS/MS	Antiviral
Risedronate	Human	Serum	N/A	0.2 ng/mL	LC-MS/MS	Osteoporosis
Risperidone/9-Hydroxyrisperidone	Human	Plasma		0.0500 / 0.0500 ng/mL	LC-MS/MS	Antipsychotic
Risperidone/9-Hydroxyrisperidone	Dog	Plasma		0.1020/0.1030 ng/mL	LC-MS/MS	Antipsychotic
Risperidone/9-Hydroxyrisperidone (Paliperidone)	Human	Plasma		0.05/0.05 ng/mL	LC-MS/MS	Antipsychotic
Ritalinic Acid	Human	Plasma	EDTA	20.0 ng/mL	LC-MS/MS	Stimulant
Rivastigmine	Human	Plasma		100 – 10,000 pg/mL	LC-MS/MS	Cholinergic
Rizatriptan	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	Migraine
R-Modafinil/R-Modafinil Acid/ Modafinil Sulfone	Human	Plasma	EDTA	0.0200ng/mL	LC-MS/MS	CNS
Rosiglitazone	Human	Plasma	EDTA	2.00 ng/mL	LC-MS/MS	Anti-diabetic
Rosuvastatin	Human	Plasma	EDTA	0.500 ng/mL	LC-MS/MS	Anti-hypercholesterolemia
Salmeterol	Human	Plasma		2.5 – 300 pg/mL	LC-MS/MS	Asthma / COPD
Sertraline	Human	Plasma	EDTA	0.250 ng/mL	LC-MS/MS	Antidepressant
Sildenafil/N-Desmethyl Sildenafil	Human	Plasma	EDTA	1/0.25 ng/mL	LC-MS/MS	Erectile Dysfunction
Simvastatin/Simvastatin Acid	Human	Plasma	EDTA	0.100 / 0.100 ng/mL	LC-MS/MS	Anti-hypercholesterolemia
Sirolimus	Human	Human Whole Blood	N/A	0.100 ng/mL	LC-MS/MS	Immunosuppressant
Spironolactone	Human	Plasma	EDTA	0.500 ng/mL	LC-MS/MS	Antihypertensive
Stavudine	Human	Plasma	EDTA	3.00 ng/mL	LC-MS/MS	Antiretroviral
Sulfapyridine	Human	Plasma	EDTA	0.050 µg/mL	LC-MS/MS	Antibacterial
Sulfasalazine	Human	Plasma	EDTA	0.150 µg/mL	LC-MS/MS	Anti-inflammatory
Sumatriptan	Human	Plasma	EDTA	1.00 ng/mL	LC-MS/MS	Migraines
Sumatriptan	Human	Plasma		2.00 ng/mL	LC-MS/MS	Migraines

## Validated Bioanalytical Methods

Compound	Species	Matrix	Anticoagulant	LLOQ	Methodology	Therapeutic Area
Sumatriptan	Human	Plasma		0.186 ng/mL	LC-MS/MS	Migraines
Tacrolimus	Human	Whole Blood	N/A	0.100 ng/mL	LC-MS/MS	Immunosuppressant
Tadalafil	Human	Plasma	EDTA	5.00 ng/mL	LC-MS/MS	Erectile Dysfunction
Tamsulosin	Human	Plasma		0.200 ng/mL	LC-MS/MS	Benign Prostatic Hyperplasia (BPH)
Tamsulosin	Human	Plasma		0.140 ng/mL	LC-MS/MS	Benign Prostatic Hyperplasia (BPH)
Telithromycin	Human	Plasma		10.0 ng/mL	LC-MS/MS	Antibiotic
Telmisartan	Human	Plasma	EDTA	0.500 ng/mL	LC-MS/MS	Antihypertensive
Temazepam	Human	Plasma	Na Heparin	20.0 ng/mL	LC-MS/MS	Sedative / Muscle Relaxant
Terbinafine	Human	Plasma	EDTA	5.00 ng/mL	LC-MS/MS	Antifungal
Testosterone	Human	Serum	N/A	0.05 – 50 ng/mL	LC-MS/MS	Steroid (Anabolic)
Testosterone/Dihydrotestosterone	Human	Serum		1.000/0.05 ng/mL	LC-MS/MS	Steroid (Anabolic)
Theophylline	Human	Plasma	EDTA	0.200 µg/mL	LC-MS/MS	Asthma / COPD
Tiagabine	Human	Plasma		0.500 ng/mL	LC-MS/MS	Anticonvulsant
Tizanidine	Human	Plasma	EDTA	0.0500 ng/mL	LC-MS/MS	Muscle Relaxant
Tolterodine/5-Hydroxymethyl Tolterodine	Human	Plasma	EDTA	0.0500 / 0.0500 ng/mL	LC-MS/MS	Antimuscarinic
Topiramate	Human	Plasma	EDTA	5.00 ng/mL	LC-MS/MS	Anticonvulsant
Torsemide	Human	Plasma	EDTA	10.0 ng/mL	LC-MS/MS	Antihypertensive
Torsemide	Human	Plasma		20.7 ng/mL	LC-MS/MS	Antihypertensive
Tramadol/O-Desmethyltramadol	Human	Plasma	EDTA	1.00 / 0.500 ng/mL	LC-MS/MS	Analgesic (Opioid)
Tramadol/O-Desmethyltramadol (High Range)	Human	Plasma	EDTA	2.00 / 1.00 ng/mL	LC-MS/MS	Analgesic (Opioid)
Trandolapril/Trandolaprilat	Human	Plasma	EDTA	0.0500 / 0.100 ng/mL	LC-MS/MS	Antihypertensive
Trazodone	Human	Plasma		20.0 ng/mL	LC-MS/MS	Antidepressant
Trazodone (Low Range)	Human	Plasma		10.0-3000 ng/mL	LC-MS/MS	Antidepressant
Triamcinolone Acetonide	Human	Plasma		8.08 ng/mL	LC-MS/MS	Corticosteroid
Trimethobenzamide	Human	Plasma	EDTA	20.0 ng/mL	LC-MS/MS	Antiemetic
Tropium	Human	Plasma	EDTA	10.0 pg/mL	LC-MS/MS	Antispasmodic
Tropium	Human	Plasma	EDTA	60.0 pg/mL	LC-MS/MS	Antispasmodic
Ursodiol (Free)	Human	Plasma	EDTA	30.0 ng/mL	LC-MS/MS	Anti-hypercholesterolemia
Ursodiol (Total)	Human	Plasma	EDTA	30.0 ng/mL	LC-MS/MS	Anti-hypercholesterolemia
Ursodiol Conjugates (GDCA and TDCA)	Human	Plasma	EDTA	50.0 / 50.0 ng/mL	LC-MS/MS	Anti-hypercholesterolemia
Valacyclovir	Human	Plasma		0.200 ng/mL	LC-MS/MS	Antiviral (herpes)
Valacyclovir (acyclovir)	Human	Plasma		17.0 ng/mL	LC-MS/MS	Antiviral (herpes)
Valdecoxib	Human	Plasma		0.500 ng/mL	LC-MS/MS	Analgesic (NSAID)
Valganciclovir/Ganciclovir	Human	Plasma		1.0/10.0 - 500/5000 ng/mL	LC-MS/MS	Antiviral (herpes)

NEW

## Validated Bioanalytical Methods

Compound	Species	Matrix	Anticoagulant	LLOQ	Methodology	Therapeutic Area
Valproic Acid	Human	Plasma	EDTA	0.500 ug/mL	LC-MS/MS	Anticonvulsant
Valproic Acid	Human	Plasma		0.159 ug/mL	LC-MS/MS	Anticonvulsant
Valproic Acid	Human	Serum	N/A	0.500 µg/mL	LC-MS/MS	Anticonvulsant
Valsartan	Human	Plasma	EDTA	10.0 ng/mL	LC-MS/MS	Antihypertensive
Valsartan	Human	Plasma	EDTA	5.00 ng/mL	LC-MS/MS	Antihypertensive
Vardenafil	Human	Plasma	EDTA	0.100 ng/mL	LC-MS/MS	Erectile Dysfunction
Venlafaxine/ O-desmethylvenlafaxine	Human	Plasma	EDTA	2.00 / 2.00 ng/mL	LC-MS/MS	Antidepressant
Venlafaxine/ O-desmethylvenlafaxine	Human	Plasma		1.50 / 2.50 ng/mL	LC-MS/MS	Antidepressant
Vitamin D3	Human	Plasma		0.5 ng/mL	LC-MS/MS	Vitamin
Voriconazole	Human	Plasma	EDTA	20.0 ng/mL	LC-MS/MS	Antifungal
Warfarin (Racemic)	Human	Plasma	EDTA	10.0 ng/mL	LC-MS/MS	Anticoagulant
Zaleplon	Human	Plasma	EDTA	0.200 ng/mL	LC-MS/MS	Sedative
Zidovudine/Lamivudine	Human	Plasma	EDTA	6.00 / 6.00 ng/mL	LC-MS/MS	Antiretroviral
Ziprasidone	Human	Plasma	EDTA	0.500 ng/mL	LC-MS/MS	Antipsychotic
Zolpidem	Human	Plasma	EDTA	1.00 ng/mL	LC-MS/MS	Sedative
Zonisamide	Human	Serum	N/A	5.00 ng/mL	LC-MS/MS	Anticonvulsant

© 2011 Cetero Research  
 Bioanalytical Assays  
 Volume 07/11

## Cetero Bioanalytical Equipment

### LC-MS/MS Laboratory

Sciex™	Total
3000	19
4000	14
5000	2
5500	2
<b>Total Sciex™</b>	<b>37</b>
Micromass®	
Ultima™	Total
Ultima™	4
96-Well Liquid Handlers	
Tomtec® Quadra	Total
Tomtec® Quadra	6
PerkinElmer MultiPROBE	3

### Ligand Binding Laboratory

Microplate Readers	Total
Meso Scale Discovery SECTOR® Imager 2400	1
Molecular Devices SpectraMax® L Luminescence	1
Molecular Devices SpectraMax® 340 PC384	2
Plate Washers	
BioTek Elx-405	Total
BioTek Elx-405	1
Nunc-Immunowash 12	1
Bio-Rad 1575 Immunowash	1
Automated Liquid Handler	
Tomtec® Quadra 96	Total
Tomtec® Quadra 96	1
Facility	
Environmentally-Controlled Room	1