

FARMOVS

Integrated research solutions



VALIDATED ASSAY METHODS

June 2020

REGULATORY HISTORY



EUROPEAN
MEDICINES
AGENCY



agencia española de
medicamentos y
productos sanitarios



Guidance for Industry, Bioanalytical Method Validation (May 2018) U.S. Department of Health and Human Services Food and Drug Administration.

“CPMP/EWP/QWP/1401/98, Note for Guidance on the Investigation of Bioavailability and Bioequivalence” (EMEA)



CERTIFICATE OF COMPLIANCE

In terms of section 22(2) (b) of the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, 2006 (Act 19 of 2006), read with sections 23(1), (2) and (3) of the said Act, I hereby certify that:-

FARMOVS PAREXEL (PTY) LTD

Co. Reg. No.: 2000/003545/07

BIOANALYTICAL SERVICES DIVISION

Facility Compliance Number: G0016

is a South African National Accreditation System compliant facility
provided that all conditions and requirements are complied with

This certificate is valid as per the scope as stated in the accompanying schedule of compliance,
Annexure "A", bearing the above compliance number for

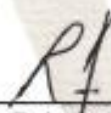
BIOANALYTICAL CHEMISTRY TESTING

Conducted on: Biological Specimens

Date of Inspection: 07 December 2017

This facility is in compliance with the OECD Principles of Good Laboratory Practice (1997) in the
conduct of non-clinical health and environmental safety studies of test items contained in
pharmaceutical products, veterinary drugs and pesticides

While this certificate remains valid, the compliant facility named above is authorised to use the
relevant compliance symbol to issue reports and/or certificates



Mr R Josias

Chief Executive Officer

Effective Date: 31 July 2016

Certificate Expires: 30 July 2021



Bioanalysis

- GLP certified bio-analytical labs
- More than 500 internally developed and validated analytical methods
- Adhere to both ICH, FDA and EMA guidelines with audit history
- More than 3,000 pre-clinical and clinical trials
- LC-MS/MS, HPLC, RIA, ELISA and other ligand binding assay techniques
- ~125,000 samples analysed per year
- Liquid-Liquid, SPE and other sample preparation techniques



* compound also analysed in combination with other compounds
Bold = parent compound + metabolite(s)

Validated Assay Methods

DRUG	LLOQ	METHOD	MATRIX	TEMPERATURE and STORAGE CONDITIONS	
Acamprosate	1.08 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Acarbose	0.32 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Acebutolol	5.56 ng/ml	HPLC	Plasma	-20 °C	Normal Light
Diacetolol	20.9 ng/ml	HPLC	Plasma	-20 °C	Normal Light
Aceclofenac	25.1 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Acetaminophen	0.16 µg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Acetazolamide	14.2 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Acetylsalicylic Acid	28.1 ng/ml	HPLC	Plasma	-70 °C	Normal Light
Salicylic Acid	40.0 ng/ml	HPLC	Plasma	-70 °C	Normal Light
Acyclovir	5.03 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
α-GST	2.50 ng/ml	ELISA	Urine	-20 °C	Normal Light
α-GST	0.74 ng/ml	ELISA	Serum	-20 °C	Normal Light
Alfuzosin	0.34 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Alendronate	1.95 ng/ml	HPLC	Urine	-20 °C	Normal Light
Allopurinol	0.35 µg/ml	HPLC UV	Plasma	-20 °C	Normal Light
Oxypurinol	0.64 µg/ml	HPLC UV	Plasma	-20 °C	Normal Light
Alprazolam	0.50 ng/ml	GC ECD	Plasma	-20 °C	Normal Light
Altizide	3.03 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Ambroxol	0.28 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Amiloride*	0.28 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Amiodarone	1.57 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
N-desethylamiodarone	6.96 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Amisulpride	2.40 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Amitriptyline	0.89 ng/ml	GC NPD	Plasma	-20 °C	Normal Light
Amlodipine	0.05 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Amoxicillin*	78.1 ng/ml	HPLC UV	Plasma	-70 °C	Normal Light
Anagrelide	0.09 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Antipyrine	0.60 µg/ml	HPLC UV	Urine	-70 °C	Normal Light
4-OH-antipyrine	1.94 µg/ml	HPLC UV	Urine	-70 °C	Normal Light
Nor-Antipyrine	1.05 µg/ml	HPLC UV	Urine	-70 °C	Normal Light
Anti-Insulin Antibodies	200 ng/ml	RIPA	Serum	-20 °C	Normal Light
Aripiprazole	0.50 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Atenolol	13.0 ng/ml	HPLC	Plasma	-70 °C	Normal Light
Atomoxetine	1.95 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
4-Hydroxyatomoxetine	0.09 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
N-desmethyلاتomoxetine	0.09 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light

Validated Assay Methods

DRUG	LLOQ	METHOD	MATRIX	TEMPERATURE and STORAGE CONDITIONS	
Atovaquone	0.44 µg/ml	HPLC UV	Plasma	-20 °C	Normal Light
Atropine	0.61 µg/ml	LC-MS/MS	Colic Mixture	-20 °C	Normal Light
Azathioprine	0.47 ng/ml	LC-MS/MS	Plasma	-70 °C	Light Sensitive
6-Mercaptopurine	0.47 ng/ml	LC-MS/MS	Plasma	-70 °C	Light Sensitive
Baclofen	35.0 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Beclomethasone-di-propionate	39.1 pg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Beclomethasone-m-propionate	38.3 pg/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Bedaquiline*	39.1 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Bedaquiline-M2*	15.6 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Benfluorex	0.39 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Norfenfluramine	0.20 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
THEP	0.39 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Betamethazone	58.7 pg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Bezafibrate	0.10 µg/ml	HPLC UV	Plasma	-20 °C	Normal Light
Bicalutamide	30.3 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Bindarit	0.10 µg/ml	LC-MS/MS	Plasma/Urine	-20 °C	Normal Light
Bisoprolol	0.88 ng/ml	HPLC	Plasma	-20 °C	Normal Light
Bromazepam	1.56 ng/ml	GC ECD	Plasma	-20 °C	Normal Light
Budesonide	20.8 pg/ml	LC-MS/MS	Plasma	-70 °C	Light Sensitive
Buflomedil	0.15 µg/ml	HPLC UV	Plasma	-20 °C	Normal Light
Bumetanide	0.39 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Bupropion	7.81 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Hydroxybupropion	7.65 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Buspirone	62.5 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
6-hydroxybuspirone	15.6 pg/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Cabergoline	1.50 pg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Caffeine	5.80 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Paraxanthine	4.90 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Calanolide	22.3 ng/ml	HPLC	Plasma	-20 °C	Light Sensitive
Candesartan	2.49 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Capecitabine	7.81 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Captopril	23.3 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Carbamazepine	2.64 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Carbamazepine-10,11-epoxide	5.15 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Carbamazepine-10,11-diol	9.12 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Carbidopa	2.30 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light

Validated Assay Methods

DRUG	LLOQ	METHOD	MATRIX	TEMPERATURE and STORAGE CONDITIONS	
Carvedilol	1.26 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
4-OH-phenylcarvedilol	0.15 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Cefaclor	0.05 µg/ml	HPLC UV	Plasma	-70 °C	Normal Light
Cefazolin	0.78 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Cefetamet	0.10 µg/ml	HPLC UV	Plasma	-20 °C	Normal Light
Cefixime	100ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Cefotaxime	0.64 µg/ml	HPLC UV	Plasma/CSF	-70 °C	Normal Light
Desacety cefotaxime	0.47 µg/ml	HPLC UV	Plasma/CSF	-70 °C	Normal Light
Cefpodoxime	51.0 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Ceftriaxone	0.50 µg/ml	LC-MS/MS	Plasma	-70 °C	Light Sensitive
Cefuroxime	0.12 µg/ml	HPLC UV	Plasma	-20 °C	Normal Light
Celecoxib	3.52 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Celiprolol	7.43 ng/ml	HPLC	Plasma	-20 °C	Normal Light
Cephalexin	0.12 µg/ml	HPLC UV	Plasma	-20 °C	Normal Light
Cephradine	0.89 µg/ml	HPLC UV	Plasma	-20 °C	Normal Light
Cetirizine	0.52 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Chlormadinone acetate	0.15 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Chlorpheniramine	1.21 ng/ml	GC NPD	Plasma	-20 °C	Normal Light
Chlorpromazine	20.0pg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
7-hydroxychlorpromazine	20.0pg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Chlorpropamide	1.40 µg/ml	HPLC UV	Plasma	-20 °C	Normal Light
Chlorthalidone	0.05 µg/ml	HPLC UV	Whole Blood	-20 °C	Normal Light
Cicletanine	2.91 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Cimetidine	34.5 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Cinnarizine	3.56 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Ciprofloxacin	0.06 µg/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Cisapride	0.88 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Citalopram	0.35 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Clarithromycin	7.30 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Clavulanic Acid*	9.77 ng/ml	HPLC UV	Plasma	-70 °C	Normal Light
Clomipramine	1.50 ng/ml	HPLC ECD	Plasma	-20 °C	Normal Light
Clopidogrel (active metabolite)	0.49 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Clozapine	15.0 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Codeine*	1.00 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Cortisol	1.16 ng/ml	GC-MS	Urine	-20 °C	Normal Light
6β-OH-cortisol	7.76 ng/ml	GC-MS	Urine	-20 °C	Normal Light

Validated Assay Methods

DRUG	LLOQ	METHOD	MATRIX	TEMPERATURE and STORAGE CONDITIONS	
C-Peptide	0.07 nmol/L	RIA	Serum/Plasma	-70 °C	Normal Light
Cycloguanil	4.64 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Cyclosporine A	4.81 ng/ml	LC-MS/MS	Whole Blood	-70 °C	Light Sensitive
Cyproterone Acetate	0.55 ng/ml	GC-MS	Plasma	-20 °C	Normal Light
Danazol	6.00 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Dapivirine	5.00 pg/ml	LC-MS/MS	Plasma/Urine	-20 °C	Normal Light
Deferasirox	0.39 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Deferiprone	0.20 µg/ml	LC-MS/MS	Serum	-70 °C	Normal Light
Deferiprone-gluconoride	0.13 µg/ml	LC-MS/MS	Serum	-70 °C	Normal Light
Dehydroepiandrosterone-S	18.4 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Desipramine	0.60 ng/ml	LC-MS/MS	Serum	-70 °C	Normal Light
2-OH-Desipramine	0.60 ng/ml	LC-MS/MS	Serum	-70 °C	Normal Light
Desmethylselegiline	1.09 ng/ml	GC ECD	Plasma	-20 °C	Normal Light
Methamphetamine	1.15 ng/ml	GC ECD	Plasma	-20 °C	Normal Light
Dexamethazone	1.17 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Dexamphetamine	0.47 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Dextromethorphan	2.50 ng/ml	LC-MS/MS	Plasma/Urine	-20 °C	Normal Light
Dextrorphan	5.00 ng/ml	LC-MS/MS	Plasma/Urine	-20 °C	Normal Light
Dextropropoxyphene	0.15 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Nordextropropoxyphene	0.15 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Diacerein	50.7 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Rhein	50.7 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Diazepam	3.00 ng/ml	GC NPD	Plasma	-20 °C	Normal Light
Nor-Diazepam	3.00 ng/ml	GC NPD	Plasma	-20 °C	Normal Light
Diclofenac	0.10 ng/ml	LC-MS/MS	Plasma/Synovial	-20 °C	Normal Light
4-OH-Diclofenac	1.97 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Diclofenac	2.44 ng/ml	LC-MS/MS	Urine	-70 °C	Normal Light
4-OH-Diclofenac	2.44 ng/ml	LC-MS/MS	Urine	-70 °C	Normal Light
Diltiazem	2.34 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Desacetyldiltiazem	3.63 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
N-monodemethyldiltiazem	2.19 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Dimethylformamide	0.12 µg/ml	GC NPD	Plasma	-20 °C	Normal Light
Ethyl-N-methylcarbamate	1.11 µg/ml	GC NPD	Urine	-20 °C	Normal Light
N-methylformamide	1.12 µg/ml	GC NPD	Urine	-20 °C	Normal Light
Diminazene	100 ng/ml	HPLC	Plasma	-20 °C	Normal Light
Dimiracetam	0.16 µg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light

Validated Assay Methods

DRUG	LLOQ	METHOD	MATRIX	TEMPERATURE and STORAGE CONDITIONS	
Diphenhydramine	39.1 ng/ml	LC-MS/MS	Plasma	-70 °C	Light Sensitive
Domperidone	0.33 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Donepezil	0.11 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Dothiepin	1.52 ng/ml	GC NPD	Plasma	-20 °C	Normal Light
Doxazosin	0.29 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Doxepin	0.64 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Desmethyldoxepin	0.18 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Doxycycline	15.0 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Duloxetine	0.40 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Dutasteride	0.125 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Ebastine	0.02 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Carebastine	0.94 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Efavirenz*	14.2 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Enalapril	0.78 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Enalaprilat	0.78 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Epinephrine	15.0 pg/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Norepinephrine	30.0 pg/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Ertapenem*	0.50µg/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Erythromycin	0.15 µg/ml	HPLC ECD	Plasma	-20 °C	Normal Light
Escitalopram	0.51 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Estradiol	20.0 pg/ml	RIA	Serum	-20 °C	Normal Light
Estrone	10.0 pg/ml	RIA	Serum	-20 °C	Normal Light
Emtricitabine*	20.0 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Ethambutol	5.00 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Exemestane	0.20 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Famotidine	0.59 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Faropenem	10.8 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Fedovapagon	1.00 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Felodipine	0.02 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Fenbendazole	3.90 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Fencamfamine	7.78 ng/ml	GC NPD	Urine	-20 °C	Normal Light
Fenfluramine	7.60 ng/ml	GC ECD	Plasma	-20 °C	Normal Light
Fenofibric acid	47.2 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Fexofenadine	1.17 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Fibrino Peptide A	0.78 ng/ml	ELISA	Plasma	-70 °C	Normal Light
Finasteride	0.60 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light

Validated Assay Methods

DRUG	LLOQ	METHOD	MATRIX	TEMPERATURE and STORAGE CONDITIONS	
Flecainide	39.9 ng/ml	HPLC	Plasma	-20 °C	Normal Light
Flosequinan	30.7 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Fluconazole	6.00 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Flunitrazepam	0.15 ng/ml	GC ECD	Plasma	-20 °C	Normal Light
Fluoxetine	0.20 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Norfluoxetine	0.21 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Fluralaner	1.00 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Flurbiprofen (R- & S-)	0.04 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Fluspirilene	9.93 pg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Flutamide (hydro-)	3.10 ng/ml	GC ECD	Plasma	-20 °C	Normal Light
Fluticasone*	2.00 pg/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Formamide	1.18 µg/ml	GC NPD	Urine	-20 °C	Normal Light
Formoterol	1.56 pg/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Fosinoprilat	1.00 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Free Insulin Glargine	5.02µU/ml	RIA	Serum	-20 °C	Normal Light
Frovatriptan	0.04 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Furosemide	12.0 ng/ml	HPLC	Plasma	-20 °C	Light Sensitive
Fusidic Acid	97.6 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Gabapentin	78.7 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Galantamine	0.39 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Gemfibrozil	0.46 µg/ml	HPLC UV	Plasma	-20 °C	Normal Light
Glibenclamide	0.78 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Gliclazide	4.40 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Glimepiride	0.25 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Glucagon	7.34 pmol/L	RIA	Plasma	-20 °C	Light Sensitive
Glycopyrrolate	1.17 pg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Granisetron	0.15 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
7-OH-Granisetron	0.04 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Growth Hormone	1.00 ng/ml	RIA	Serum/Plasma	-20 °C	Normal Light
Guaifenesin*	20.0 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Haloperidol	12.5 pg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Hydrochlorothiazide*	0.18 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Hydrocortisone acetate	0.40 ng/ml	LC-MS/MS	Plasma	-70 °C	Light Sensitive
Hydrocortisone	5.00 ng/ml	LC-MS/MS	Plasma	-70 °C	Light Sensitive
Hydroxyflutamide	3.10 ng/ml	GC ECD	Plasma	-20 °C	Normal Light
Ibuprofen (R- & S-)*	0.12 µg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light

Validated Assay Methods

DRUG	LLOQ	METHOD	MATRIX	TEMPERATURE and STORAGE CONDITIONS	
Imatinib	25.0 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Indacaterol	5.00 pg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Indapamide	0.78 ng/ml	LC-MS/MS	Whole Blood	-20 °C	Normal Light
Indomethacin	33.7 ng/ml	HPLC	Plasma	-20 °C	Normal Light
Indoramin	1.53 ng/ml	HPLC	Plasma	-20 °C	Light Sensitive
6-OH-Indoramin	2.25 ng/ml	HPLC	Plasma	-20 °C	Light Sensitive
Insulin - Glulisine	2.00 pg/ml	RIA	Serum/Plasma	-20 °C	Normal Light
Insulin - Human	5.00 µIU/ml	RIA	Serum	-20 °C	Normal Light
Insulin - Human (Free)	5.00 µIU/ml	RIA	Serum/Plasma	-20 °C	Normal Light
Insulin (Immunoreactive - free)	5.00 µIU/ml	RIA	Serum	-20 °C	Normal Light
Insulin - Lispro	5.00 µIU/ml	RIA	Plasma/Urine	-20 °C	Normal Light
Ipsapirone	1.50 ng/ml	HPLC ECD	Plasma	-20 °C	Normal Light
Iron	1.89 µg/ml	ICP	Plasma	-70 °C	Normal Light
Isoniazid	4.90 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Isosorbide-5-mononitrate	10.2 ng/ml	GC ECD	Plasma	-20 °C	Normal Light
Isotretinoin	7.79 ng/ml	HPLC UV	Plasma	-20 °C	Light Sensitive
4-oxo-Isotretinoin	7.82 ng/ml	HPLC UV	Plasma	-20 °C	Light Sensitive
Itraconazole	6.40 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
OH-Itraconazole	6.39 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Kanamycin	0.11 µg/ml	HPLC UV	Urine	-20 °C	Normal Light
Ketoconazole	0.16 µg/ml	HPLC UV	Plasma	-20 °C	Normal Light
Ketoprofen	31.3 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Lamivudine*	32.7 ng/ml	LC-MS/MS	Plasma/DBS	-20 °C	Normal Light
Lansoprazole (R- & S-)	4.00 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
LAPS-Exendin-4	3.00 ng/ml	ELISA	Serum	-70 °C	Normal Light
LAPS-Exendin-4	2.00 ng/ml	ELISA	Urine	-70 °C	Normal Light
Levodopa	5.53 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Levonorgestrel	0.26 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Lidocaine*	0.34 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Linezolid*	281 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Lisinopril	0.92 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Lofepamine	0.73 ng/ml	HPLC ECD	Plasma	-20 °C	Normal Light
Desipramine	2.48 ng/ml	HPLC ECD	Plasma	-20 °C	Normal Light
Loratadine	0.10 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Desloratadine	0.10 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Losartan	0.13 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light

Validated Assay Methods

DRUG	LLOQ	METHOD	MATRIX	TEMPERATURE and STORAGE CONDITIONS	
EXP-3174	0.13 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Lovastatin	0.13 ng/ml	LC-MS/MS	Plasma	-70 °C	Light Sensitive
β-OH-Lovastatic acid	0.26 ng/ml	LC-MS/MS	Plasma	-70 °C	Light Sensitive
Mapracorat	11.1 pg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Maprotiline	1.08 ng/ml	HPLC	Plasma	-20 °C	Normal Light
Medroxyprogesterone-17- acetate	0.05 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Mercaptopurine	0.73 ng/ml	LC-MS/MS	Plasma	-70 °C	Light Sensitive
Meloxicam	8.05 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Melperone	0.78 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Mephenytoin (R- & S-)	11.9 ng/ml	LC-MS/MS	Urine	-20 °C	Normal Light
4-OH-Mephenytoin (R- & S-)	23.6 ng/ml	LC-MS/MS	Urine	-20 °C	Normal Light
Meropenem*	0.39 µg/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Metaxalone	39.0 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Metformin	17.5 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Methamphetamine	1.15 ng/ml	GC ECD	Plasma	-20 °C	Normal Light
Methotrexate	1.5 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Methylamphetamine	1.15 ng/ml	GC ECD	Plasma	-20 °C	Normal Light
Methyldopa	34.8 ng/ml	HPLC ECD	Plasma	-20 °C	Normal Light
Methylsalicylic Acid	62.5 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Metoclopramide	3.15 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Metoprolol	15.0 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
α-OH-Metoprolol	1.62 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Metronidazole	91.2 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
MHPG	0.40 ng/ml	HPLC ECD	Plasma	-20 °C	Normal Light
Mianserin	1.67 ng/ml	HPLC ECD	Plasma	-20 °C	Normal Light
Midazolam	0.41 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
1-OH-Midazolam	0.08 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Milnacipram	1.25 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Minocycline	10.3 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Mitotane	0.39 µg/ml	HPLC UV	Plasma	-20 °C	Normal Light
Molsidomine	0.84 ng/ml	HPLC UV	Plasma	-70 °C	Light Sensitive
Linsidomine	0.70 ng/ml	HPLC UV	Plasma	-70 °C	Light Sensitive
Moclobemide	3.74 ng/ml	GC ECD	Plasma	-20 °C	Light Sensitive
Monic Acid (mupirocin)	50.1 ng/ml	LC-MS/MS	Urine	-20 °C	Light Sensitive
Montelukast	3.91 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Morphine	0.50 ng/ml	RIA	Plasma	-20 °C	Normal Light

Validated Assay Methods

DRUG	LLOQ	METHOD	MATRIX	TEMPERATURE and STORAGE CONDITIONS	
Morphine-3-glucuronide	6.42 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Morphine-6-glucuronide	3.64 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Moxifloxacin*	12.0 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Moxonidine	20.5 pg/ml	GC-MS	Plasma	-20 °C	Normal Light
Mupirocin (Monic Acid)	0.50 ng/ml	LC-MS/MS	Plasma/Urine	-20 °C	Light Sensitive
Nabumetone metabolite (6-MNA)	0.07 µg/ml	HPLC UV	Plasma	-20 °C	Normal Light
Naftidrofuryl	3.92 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Naloxone-3-glucaronide	0.96 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Naproxen	0.08 µg/ml	HPLC UV	Plasma	-20 °C	Normal Light
Naratriptan	0.08 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Natamycin	2.00 ng/ml	LC-MS/MS	Wine	-20 °C	Normal Light
Nevirapine*	18.6 ng/ml	LC-MS/MS	Plasma/DBS	-20 °C	Normal Light
2-OH-Nevirapine	11.8 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
3-OH-Nevirapine	11.8 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
8-OH-Nevirapine	11.8 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
12-OH-Nevirapine	11.8 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
4-Carboxynevirapine	11.8 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Nicardipine	0.70 ng/ml	GC ECD	Plasma	-20 °C	Light Sensitive
Nicotine	0.47 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Cotinine	7.68 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Nifedipine	0.64 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Nimesulide	3.76 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Nimodipine	0.59 ng/ml	GC ECD	Plasma	-20 °C	Light Sensitive
Nitisinone	19.5 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Nitrofurantoin	0.78 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Nitroxoline	0.25 µg/ml	HPLC UV	Plasma	-20 °C	Normal Light
Nizatidine	11.9 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Norfloxacin	25.9 ng/ml	HPLC	Plasma	-20 °C	Normal Light
Nortilidine	2.78 ng/ml	GC NPD	Plasma	-20 °C	Normal Light
Nortriptyline	0.94 ng/ml	GC NPD	Plasma	-20 °C	Normal Light
Ofloxacin	54.5 ng/ml	HPLC	Plasma	-20 °C	Light Sensitive
Olanzapine	0.16 ng/ml	LC-MS/MS	Plasma	-70 °C	Light Sensitive
Omeprazole	0.39 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
5-OH-omeprazole	0.39 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Ondansetron	0.26 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Opipramol	0.47 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light

Validated Assay Methods

DRUG	LLOQ	METHOD	MATRIX	TEMPERATURE and STORAGE CONDITIONS	
Deshydroxyethylpipramol	0.12 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Orphenadrine	0.55 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Osteocalcin	2.40 ng/ml	ELISA	Serum	-70 °C	Normal Light
Oxaborales	1.95 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Oxcarbazepine	7.82 ng/ml	LC-MS/MS	Plasma	-70 °C	Light Sensitive
10-OH-Carbazepine	23.7 ng/ml	LC-MS/MS	Plasma	-70 °C	Light Sensitive
Oxaquin	10.3 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Oxfendazole*	2.54 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Oxybutynin (R- & S-)	0.06 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Desethyloxybutynin	0.10 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Desethyloxybutynin (R- & S-)	0.05 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Oxyclozanide*	0.20 µg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Pretomanid	4.00 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Paclitaxel (Total)	20.0 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Paliperidone	0.12 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Pantoprazole	5.38 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Paracetamol*	60.2 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Paroxetine	0.33 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Perindopril	0.08 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Perindoprilat	0.17 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Phentermine	18.7 ng/ml	GC NPD	Plasma	-20 °C	Normal Light
Phenylbutyrate	0.49 µg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Phenylephrine	9.00 pg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Phenylpropanolamine	10.0 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Phenytoin	40.0 ng/ml	HPLC UV	Plasma	-20 °C	Light Sensitive
Pipamperone	6.31 ng/ml	HPLC UV	Plasma	-70 °C	Normal Light
Piroxicam	1.24 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Pravastatin	0.78 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
3-hydroxypravastatin	0.78 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Praziquantel (D- & L-)	5.86 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
4-hydroxypraziquantel (D- & L-)	19.5 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Prazosin	0.46 ng/ml	HPLC	Plasma	-20 °C	Normal Light
Prednisone	3.18 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Prednisolone	2.59 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
3,20- Pregnane-dione	0.46 ng/ml	GC-MS	Plasma	-20 °C	Normal Light
Pretonamide*	0.391 µg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light

Validated Assay Methods

DRUG	LLOQ	METHOD	MATRIX	TEMPERATURE and STORAGE CONDITIONS	
Prilocane*	0.20 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Progesterone	0.04 ng/ml	GC-MS	Plasma	-20 °C	Normal Light
Proguanil	4.63 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Promethazine	0.64 ng/ml	GC NPD	Plasma	-20 °C	Light Sensitive
Propranolol	3.50 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Prostate Specific Antigen (PSA)	0.50 nmol/L	RIA	Serum	-20 °C	Normal Light
Protrombin (F1+2)	0.04 nmol/L	ELISA	Plasma	-70 °C	Normal Light
Pseudoephedrine	1.56 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Pyrantel	15.0 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Pyrazinamide*	46.9 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Quetiapine	0.12 µg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
N-desalkylQuetiapine	1.00 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Quinidine	80.0 ng/ml	HPLC	Plasma	-20 °C	Normal Light
Racecadotril (prodrug-thiorphan)	4.05 ng/ml	LC-MS/MS	Plasma	-70 °C	Light Sensitive
Ranitidine	14.6 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Rifampicin	586 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
DesacetylRifampicin	13.7 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Rilmenidine	0.21 ng/ml	LC-MS/MS	Plasma	-20 °C	Light Sensitive
Risperidone	39.1 pg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
9-OH-risperidone	39.1 pg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Roflumilast	1.16 ng/ml	GC-MS	Plasma	-20 °C	Normal Light
Roxithromycin	50.3 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Salbutamol (R- & S-)	25.0 pg/ml	LC-MS/MS	Plasma	-70 °C	Light Sensitive
Salmeterol*	4.00 pg/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Sarolaner	0.50 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Scopolamine	2.00 pg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Selegiline (Desmethyl)	1.09 ng/ml	GC ECD	Plasma	-20 °C	Normal Light
Methamphetamine	1.15 ng/ml	GC ECD	Plasma	-20 °C	Normal Light
Serotonin	0.20 ng/ml	LC-MS/MS	CSF	-20 °C	Normal Light
5-HIAA	0.50 ng/ml	LC-MS/MS	CSF	-20 °C	Normal Light
Sertraline	0.10 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Sibutramine	0.05 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Mono-N-desmethysibutramine	0.05 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Di-N-desmethysibutramine	0.10 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Spironolactone	0.47 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light

Validated Assay Methods

DRUG	LLOQ	METHOD	MATRIX	TEMPERATURE and STORAGE CONDITIONS	
Canrenone	0.47 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
7 α -thiomethylspirolactone	1.25 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Stavudine*	5.76 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Sulindac	50.0 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Sulphamethizole	0.52 μ g/ml	HPLC UV	Urine	-20 °C	Normal Light
Sulpiride	4.05 ng/ml	HPLC	Plasma	-20 °C	Normal Light
Sumatriptan	0.63 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Suramin	1.00 μ g/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
T3 (total)	0.30 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
T4 (total)	10.0 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Tacrolimus	0.06 ng/ml	LC-MS/MS	Whole Blood	-70 °C	Normal Light
Tadalafil	0.50ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Tamsulosin	29.3 pg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
TBG	5.00 μ g/ml	RIA	Serum/Plasma	-20 °C	Normal Light
Telacebec	1.00 ng/ml	LC-MS/MS	Plasma/Urine	-70 °C	Light Sensitive
Telmisartan	2.00 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Tenovofir*	1.00 ng/ml	LC-MS/MS	Plasma/DBS	-20 °C	Normal Light
Terazosin	0.58 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Terbinafine	3.32 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Terfenadine Acid Metabolites	8.35 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Testosterone	0.70 nmol/L	RIA	Plasma/Serum	-20 °C	Normal Light
Tetracycline	43.3 ng/ml	HPLC UV	Plasma	-20 °C	Light Sensitive
Tissue Factor Pathway Inhibitor	0.64 ng/ml	ELISA	Plasma	-70 °C	Normal Light
Theophylline	10.0 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
3-methylxanthine	6.00 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Thiocolchicine (3-desmethyl)	0.39 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Thiorphan	4.05 ng/ml	LC-MS/MS	Plasma	-70 °C	Light Sensitive
Thrombin/Antithrombin (TAT)	2.00 μ g/l	ELISA	Plasma	-70 °C	Normal Light
Tibolone	0.04 ng/ml	GC-MS	Plasma	-20 °C	Normal Light
Ticlopidine	1.98 ng/ml	GC NPD	Plasma	-20 °C	Normal Light
Timolol	12.6 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light
Tolbutamide	0.40 μ g/ml	HPLC UV	Plasma	-20 °C	Normal Light
Tolterodine	46.9 pg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Topiramate	46.9 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Tramadol (R- & S-)	3.00 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
O-desmethyltramadol (R- & S-)	0.79 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light

Validated Assay Methods

DRUG	LLOQ	METHOD	MATRIX	TEMPERATURE and STORAGE CONDITIONS	
Tranexamic acid	0.11 µg/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Trazodone	7.75 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
m-chlorophenylpiperazine	0.23 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Triamterene	2.50 ng/ml	HPLC	Plasma	-20 °C	Normal Light
p-OH-Triamterene	30.5 ng/ml	HPLC	Plasma	-20 °C	Normal Light
Triazolam	0.20 ng/ml	GC NPD	Plasma	-20 °C	Normal Light
Trientine	10.0 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
N1-acetyltriethylenetetramine	10.0 ng/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Trimetazidine	1.52 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Trimipramine	0.12 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Ulifloxacin	0.10 mg/ml	LC-MS/MS	Plasma/Urine	-20 °C	Normal Light
Urapidil	13.3 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Valacyclovir	1.58 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Valsartan	24.5 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Venlafaxine	0.63 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
O-dimethylvenlafaxine	0.79 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Verapamil	4.02 ng/ml	HPLC	Plasma	-20 °C	Normal Light
Norverapamil	2.01 ng/ml	HPLC	Plasma	-20 °C	Normal Light
Von Willebrand Factor	5.50%	ELISA	Plasma	-70 °C	Normal Light
Warfarin (R- & S-)	2.34 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
7-OH-Warfarin	5.88 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Zidovudine*	20.0 ng/ml	LC-MS/MS	Plasma/DBS	-20 °C	Normal Light
Zolmitriptan	62.5 pg/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
N-desmethylozmilmitriptan	7.81 pg/ml	LC-MS/MS	Plasma	-70 °C	Normal Light
Zolpidem	1.98 ng/ml	HPLC	Plasma	-20 °C	Normal Light
Zonisamide	14.0 ng/ml	LC-MS/MS	Plasma	-20 °C	Normal Light
Zopiclone	4.06 ng/ml	HPLC UV	Plasma	-20 °C	Normal Light

Analytes in combination using a single bioanalytical method

- Paracetamol + Codeine + Ibuprofen
- Amoxicillin + Clavulanic Acid
- Salmeterol + Fluticasone
- Meropenem + Ertapenem
- Bedaquiline + Moxifloxacin + Pyrazinamide + Pretonamide
- Bedaquiline + Linezolid + Pretonamide
- Zidovudine + Lamivudine + Stavudine
- Tenofovir + Lamivudine
- Efavirenz + Emtricitabine + Tenofovir
- Guaifenesin + Paracetamol
- Iohexol + p-Aminohippuric Acid
- Zidovudine + Lamivudine + Nevirapine
- Amiloride + Hydrochlorothiazide
- Lidocaine + Prilocaine
- Oxfendazole + Oxyclosanide



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