TOXICOLOGY REFERENCE LABORATORY

User Guide

ROOM 708, BLOCK P
PRINCESS MARGARET HOSPITAL
2-10 Princess Margaret Hospital Road
Lai Chi Kok
Tel: 2990 1941
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http://trl.home

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Contents

Introduction

Background

There are seven toxicology laboratories within the Hospital Authority (HA) and on average each serving the needs of a cluster. Details on distribution and the role of cluster toxicology laboratories (CTLs) are listed in Appendix A. To better align service arrangement and enhance quality of service, HA has established a Toxicology Reference Laboratory (TRL) at PMH since March 2004 to support the cluster toxicology laboratories (CTLs), and in conjunction with the CTLs to cater for the toxicology needs in HA.

Objectives of TRL

The HA TRL is set up as a tertiary service to serve the following purposes:

(i) As a toxicology reference laboratory for HA
(ii) To establish a laboratory for herbal products poisoning
(iii) To provide diagnostic services for new or uncommon toxin / substances of abuse
(iv) In conjunction with the CTLs, to set up a network to cater for toxicology needs in HA

Services provided by TRL

The menu of services will be updated from time to time. For suspected toxin not on the list, clinicians are welcome to discuss the needs with TRL. The laboratory request forms are available for download at http://trl.home.

Referral System

The TRL works as a team with the CTLs. The CTLs serve to provide the initial screening and supporting on site, with the TRL functions as a back up to the CTLs and provides a referral service. Clinicians are therefore advised to discuss with their corresponding CTLs which will address the clinical needs according to the facility available at the CTL. Cases that required the support of TRL will be directed to TRL accordingly.

TRL Consultation / Enquiry

General enquiry – Tel: 2990 1941 Fax: 2990 1942
Intranet website – http://trl.home

Staff

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Ms Ce Ce LI *Patient Care Assistant II*
Ms Mandy MAN *Patient Care Assistant II*
Ms P H YU *Patient Care Assistant IIIB*

How to Make Laboratory Request

Instruction for Referring Clinician

1. TRL Request Form and TRL Therapeutic Drug Monitoring Request Form are available for download at http://trl.home
2. The following information is required:
   (a) Patient's name / HKID / Sex / Age / DOB / Hospital Encounter Number
   (b) Requesting location (hospital ward, out-patient clinic etc)
   (c) Name and contact number of referring clinician
   (d) Relevant clinical and drug history
   (e) Date and time of specimen collection
   (f) Specimen type(s)
   (g) Test(s) requested
   (h) Signature of referring clinician
3. Additional information is required for requesting therapeutic drug monitoring. Please refer to the TRL Therapeutic Drug Monitoring Request Form for details.
4. Send the request form and labeled specimens to the Chemical Pathology laboratory in your hospital. The specimens would then be directed to TRL as required.

Instruction for Referring Laboratory

1. The following information is to be provided by the referring laboratory:
   (a) Report copy to _____ laboratory (If the field is not specified, a report copy will be sent to Chemical Pathology laboratory of the requesting location),
   (b) Specimen laboratory number assigned by the referring laboratory
2. For drug confirmation request, please provide information of the patient and attending clinician as above together with the name and signature of referring laboratory personnel making the request
3. Send the TRL request form and labeled specimens, to the following address:
   Chemical Pathology Laboratory, 11/F, Block G, Princess Margaret Hospital, Lai Chi Kok
   With attention to "Toxicology Reference Laboratory"

Specimen Collection and Handling

- Different laboratory tests require specific specimen containers. Consult this guide for the appropriate specimen containers for a particular test.
- All specimens should be tightly capped, checked for leakage and properly labeled with patient's name and HKID.
- For non-biological samples, different specimens should be placed in individual container bags. Please stick the patient's gum label on the individual container bags instead of the specimens

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- For drug products, please provide product packaging, insert and multiple pills if available.
- For herb/plant, please provide unused herbs/plants, herbal broth, herbal remnant and herbal formula if available.
- All the specimens should be put together into a secondary container bag. TRL request form should be placed in the carrying pocket of secondary container bag.
- Do not stick the specimen onto paper or TRL request form.

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Specimen Reception Hours

Monday – Friday 9:00am – 5:30pm

In case a typhoon signal No. 8 or above, or a 'Black' rainstorm warning is hoisted, laboratory service will be suspended. Please contact us for the availability of service before sending specimens.

Rejection of Requests

Specimens with one or more of the following conditions will be rejected:

- Spilt specimens or soiled request forms
- Biological specimens without specimen collection date
- Specimens stuck on request form
- Unlabeled or mislabeled specimens
- Specimens in wrong containers
- Mishandled specimens that are not suitable for processing, e.g. improper transport conditions or outdated specimens
- Specimens with insufficient quantity
- Requests with insufficient information to identify the patient and the authorized requester
- Tests requested not available
- Empty or broken containers
- Serum samples for Therapeutic Drug Monitoring of Psychotropic Drugs received more than 21 days after blood collection

Remarks:
Difficult to replace or critical specimens will be processed but results not released until the problem has been resolved.

Reporting of Results

- Please refer to individual laboratory tests for turnaround time.
- A hardcopy of report will be printed, at the requesting location and referring laboratory respectively, when results are ready.
- Patient's results can be assessed from electronic patient record under "toxicology" directory.
- Routinely, all the biological and non-biological specimens will be kept for two weeks and four months, respectively

Alphabetical List of Laboratory Tests

Amatoxins and Phallotoxins Target Analysis

Specimen:	- 30 mL spot urine - 4 mL clotted blood - Non-biological specimen (as much as possible) e.g. Mushroom
Container:	- Plain bottle (no preservative including boric acid) for urine - Plain bottle (no gel) for clotted blood - Individual container bag for non-biological specimen
Request form:	TRL request form (PMH710 updated on 01/June/2022)
Turnaround time:	3 days
Indication:	Suspected ingestion of hepatotoxic mushrooms e.g. certain Amanita, Galerina, and Lepiota species
Test(s) included:	Amatoxins alpha-Amanitin, beta-Amanitin and gamma-Amanitin Phallotoxins Phalloidin and Phallacidin
Limitation:	The analysis is qualitative only.

Anabolic Steroids Target Analysis

Specimen:	30 mL spot urine (Store urine at -20ºC and protect sample from light if sample is not sent out immediately)
Container:	Plain bottle (no preservative including boric acid)
Request form:	TRL Request form (PMH710 updated on 01/04/2016)
Turnaround time:	1 week
Indication:	Suspected use of anabolic steroids
Test(s) included:	Please refer to Appendix D
Limitation:	Unstable in room temperature. The analysis is qualitative only.

Animal Thyroid Tissue Target Analysis

Specimen: Non-biological specimen (as much as possible):
- Proprietary Chinese medicine
- Pharmaceutical products
- Health products

Container: Original container with package insert (preferred) or individual container bag

Request form: TRL request form (PMH710 updated on 01/June/2022)

Turnaround time: 1 – 2 weeks

Indication: Suspected factitious thyrotoxicosis

Test(s) included: DIT (3,5-Diiodo-L-tyrosine), MIT (3-iodo-L-tyrosine), rT3 (3,3',5'-Triiodo-L-thyronine), T2 (3,5-Diiodo-L-thyronine), T3 (3,3,5-Triiodo-L-thyronine), T4 (L-Thyroxine)

Limitation: Owing to structural similarity among analytes, non-specificity was observed when the detection level is high. The following table shows the percentage non-specificity at a concentration 20 times of the limit of detection.

Analyte	Possible non-specific compound	Estimated percentage relative to target analyte concentration
MIT	DIT	0.7%
T2A	T3	1.2%
T3	T2A	2.5%
rT3	MIT	2.8%
	T4	1.9%
T4	T3	4.5%

Chloroxylenol Analysis (Dettol)

Specimen:
- 20 mL spot urine
- Non-biological specimen (as much as possible) e.g. unknown liquid, suspected dettol.

Container:
- Plain bottle (no preservative including boric acid) for urine
- Original container with package insert (preferred) or individual container bag for non-biological specimen

Request form: TRL Request form (PMH710 updated on 01/June/2022)

Turnaround time: 1 – 2 weeks

Indication: Suspected chloroxylenol poisoning

Test(s) included: Chloroxylenol and its metabolite(s)

Limitation: The current assay is limited to detect chloroxylenol and its metabolite(s) only. Other antiseptics with similar structure such as dichloroxylenol and trichloroxylenol could not be identified.

Corticosteroids Target Analysis

Specimen: Non-biological specimen (as much as possible):

- Proprietary Chinese medicine
- Pharmaceutical products
- Health products

Container: Original container with package insert (preferred) or individual container bag

Request form: TRL request form (PMH710 updated on 01/June/2022)

Turnaround time: 1 – 2 weeks

Indication: Suspected use of exogenous corticosteroids

Test(s) included: Alclometasone diproprionate, Beclomethasone, Betamethasone, Betamethasone dipropionate, Betamethasone valerate, Budesonide, Clobetasol propionate, Clobetasone butyrate, Cortisone acetate, Dexamethasone, Dexamethasone acetate, Diflucortolone valerate, Flucinonide, Flucinolone acetonide, Fludrocortisone acetate, Flumethasone, Fluorometholone, Fluticasone proprionate, Hydrocortisone, Hydrocortisone acetate, Methylprednisolone, Mometasone furoate, Prednisolone, Prednisolone acetate, Prednisone, Prednisone acetate, Triamcinolone and Triamcinolone acetonide

Limitation: Owing to structural similarity among analytes, non-specificity was observed when the detection level is high. The following table shows the percentage non-specificity at a concentration 20 times of the limit of detection. The suspected non-specific compound(s), which with a detection signal below 15% of the target analyte, will not be reported.

Analytes	Possible non-specific compound	Estimated percentage relative to target analyte signal
Dexamethasone acetate	Dexamethasone	1.8%
Fluocinonide	Fluocinolone acetonide	2.0%
Hydrocortisone	Hydrocortisone acetate	0.4%
Hydrocortisone acetate	Hydrocortisone Cortisone acetate	0.4% 0.1%
Prednisolone	Hydrocortisone	0.2%
Prednisolone acetate	Prednisolone Hydrocortisone acetate Prednisone acetate	6.1% 1.9% 0.4%
Prednisone acetate	Prednisone Cortisone acetate Prednisolone	2.2% 1.2% 0.2%

Cyanide screening (spot test) & Cyanide and Metabolites Quantitative Analysis

Specimen:
- 4 mL whole blood for cyanide (quantitative)
- 4 mL EDTA blood for cyanide metabolites (quantitative)
- 30 mL spot urine for cyanide screening (spot test) and general toxicology screening
- Non-biological specimen (qualitative) (as much as possible) e.g. unknown liquid, powder

Container:
- Cyanide Specimen Collection Kit
  (available in cluster Chemical Pathology Laboratory and TRL)
  - 2 pre-treated fluoride-oxalate tubes for whole blood cyanide
  - 1 EDTA tube for cyanide metabolites
  - 1 plain bottle for urine cyanide screening (spot test) and general toxicology screening
- Original container with package insert (preferred) of the liquid / powder or plain bottle

Request form: TRL request form (PMH710 updated on 01/June/2022)

Turnaround time: Cyanide screening (spot test): 1 day
Cyanide and Metabolites Quantitative Analysis: 2 – 4 days
General toxicology screening: 3 days

Indication: Suspected cyanide poisoning

Test(s) included: Cyanide
Cyanide metabolites: Thiocyanate and 2-Aminothiazoline-4-carboxylic acid (ATCA)

Toxic level: Cyanide: > 0.5 mg/L (Ref: Poisoning & Drug Overdose. 4th ed. 2004 ISBN 007123652X)

Reference interval^:

	Non-smokers	Smokers
Thiocyanate	4.6 – 130 µmol/L	12 – 220 µmol/L
ATCA	0.15 – 0.27 µmol/L	0.19 – 0.45 µmol/L

^Ref: Biomarkers 2012;17(7):625–33

Limitation: Cyanide is unstable, refer to the Instructions for cyanide specimen collection kit.

Notes:
1. Prior arrangement with the laboratory is necessary. (Tel: 29901941)
2. Contact your cluster Chemical Pathology Laboratory to obtain the Cyanide Specimen Collection Kit.
3. Initial qualitative screening of cyanide in urine should be confirmed by quantitative assays with the above specimens at TRL
3. See the following instruction for specimen collection of cyanide analysis.

Hospital Authority Toxicology Reference Laboratory
Tel: 2990 1941 Fax: 2990 1942 Intranet: http://trl.home

Instructions for Cyanide Specimen Collection Kit

This kit contains:

- 2 x **yellow SPECIAL fluoride-oxalate tubes**
- 1 x **purple EDTA tube**
- 1 x **plain urine bottle**
- 1 x **TRL request form**

Instructions:

1. **Label** clearly on ALL the specimen containers:
   - ☐ Patient's name
   - ☐ Patient's HKID
   - ☐ Collection time and date
2. Collect **blood** into each of the two yellow and one purple blood tubes. Ensure the yellow tubes are each filled up to the blue line (Figure).
3. **Mix** the above blood samples by gently inverting them for 10-15 times. ***** Samples with even minor clots can affect the cyanide result. *****
4. Collect 30 mL **spot urine** into the plain bottle.
5. (Optional) Retrieve remaining liquid/product, container, packaging and/or insert wherever available. *Take extra safety precautions due to the potentially highly toxic nature and **ensure no leakage***.
6. Complete the **TRL request form**.
7. Phone contact (1) TRL and (2) local core laboratory.
8. Send the below immediately to local core laboratory:
   - ☐ Fluoride-oxalate blood x2 **on ICE SLURRY**
   - ☐ EDTA blood x1 **on ICE SLURRY**
   - ☐ Spot urine x1
   - ☐ Completed TRL request form
   - ☐ Remaining liquid/product(s) if any (ensure no leakage)

SPECIAL
fluoride-oxalate tube

For referring laboratory:

1. **Fluoride-oxalate tubes:** Send **on ICE SLURRY** to PMH G11 within 24 hours of collection; store at 4°C if immediate delivery is not possible.
2. **EDTA tube:** Centrifuge and separate plasma. Send plasma **on ICE SLURRY** to PMH G11 within 24 hours of collection; store at 4°C if immediate delivery is not possible.
3. Optional **non-biological specimen(s):** ensure no leakage and send to PMH G11 with (1) and (2).
4. **Urine:** for cyanide screening and general toxicology screening at cluster laboratory.

Digoxin-like Cardiac Glycosides Target Analysis

Specimen:
- 30 mL spot urine
- Non-biological specimen (as much as possible):
  - Proprietary Chinese medicine
  - Pharmaceutical products
  - Health products

Container:
- Plain bottle for urine
- Original container with package insert (preferred) or individual container bag for non-biological specimen

Request form: TRL request form (PMH710 updated on 01/June/2022)

Turnaround time: 1 – 2 weeks

Indication: Suspected digoxin-like cardiac glycosides toxicity

Test(s) included:

Source	Analytes	Source	Analytes
Bufo 蟾蜍屬 (Animal)	Arenobufagin Bufalin Bufotalin Cinobufagin Cinobufotalin	*Digitalis* 洋地黃屬 (Plant)	Digitoxigenin Digitoxin Digoxigenin Digoxin
		Convallaria 鈴蘭屬 (Plant)	Convallatoxin
Strophanthus 羊角拗屬 (Plant)	K-Strophanthoside Strophanthidin Strophanthidol G-Strophanthin (=Ouabain) K-Strophanthin (=Cymarin)	*Nerium* 夾竹桃屬 (Plant)	Oleandrin
		Thevetia 黃花夾竹桃屬 (Plant)	Thevetin B

Limitation: Owing to structural similarity among analyte groups, non-specificity was observed when the detection level is high. The following table shows the percentage non-specificity of analyte standard at 1ppm level. Any interfering signal contributed to below 10% signal of the analyte will not be reported.

Analyte	Non-specific compound present with analysis of 1 ppm analyte standard	Relative signal of the non-specific compound compared with analyte (%)
Bufalin	Digitoxigenin	0.3

Analyte	Non-specific compound present with analysis of 1 ppm analyte standard	Relative signal of the non-specific compound compared with analyte (%)
Bufotalin	Arenobufagin	0.7
Cinobufagin	Resibufogenin	1.2
Cinobufotalin	Bufotalin	7.9
Convallatoxin	Strophanthidin	1.5
Strophanthoside	Strophanthidin	1.8
Strophanthidin	Strophanthidol	5.1

Diuretics and Laxatives Target Analysis

Specimen: 30 mL urine
Container: Plain bottle (no preservative including boric acid)
Request form: TRL request form (PMH710 updated on 01/June/2022)
Turnaround time: 1 – 2 weeks
Indication: Suspected concealed or unwitting use of diuretics or laxatives
Test(s) included: Diuretics
Acetazolamide, Amiloride, Bumetanide, Canrenone, Chlorthalidone, Cyclopenthiazide, Eplerenone, Frusemide, Glycyrrhetinic acid, Hydrochlorothiazide, Indapamide, Methyclothiazide, Metolazone, Probenecid, Spironolactone, Torasemide and Triamterene
Laxatives
Aloe-emodin, Bisacodyl metabolite, Danthron, Emodin, Oxyphenisatin, Phenolphthalein and Rhein

Drug of Abuse Testing

Specimen: 20 mL spot urine
Container: Plain bottle (no preservative including boric acid)
(*For suspected *psilocin* cases, protect sample from light)
Request form: TRL Request form (PMH710 updated on 01/June/2022)
Turnaround time: 1-2 weeks
Indication:
- Confirmatory testing of drugs of abuse
- Suspected use of emerging drugs of abuse (new psychoactive substances)

Test(s) included: Please refer to Appendix C
Limitation: Urine drug of abuse testing is qualitative only.

Erectile Dysfunction Drugs and Related Analogues Target Analysis

Specimen:	30 mL urine
Container:	Plain bottle (no preservative including boric acid)
Request form:	TRL request form (PMH710 updated on 01/June/2022)
Turnaround time:	1 – 2 weeks
Indication:	Suspected use of erectile dysfunction drugs / related analogues
Test(s) included:	Erectile dysfunction drugs Sildenafil and Sildenafil metabolites, Tadalafil, Vardenafil and Vardenafil metabolites Erectile dysfunction drug analogues Acetil-acid, Aildenafil, Aminotadalafil, Carbodenafil, Chloropretadalafil, Gendenafil, Hydrolysis product of Vardenafil, Hydroxyhomosildenafil, Hydroxyvardenafil, Imidazosagatriazinone, Norneosildenafil, Piperidenafil and Udenafil
Limitation:	The analysis is qualitative only.

Ethylene Glycol and Diethylene Glycol Quantitative Analysis

Specimen:	4 mL clotted blood
Container:	Plain bottle (no gel)
Request form:	TRL request form (PMH710 updated on 01/June/2022)
Turnaround time:	1 – 2 days
Indication:	Suspected ethylene glycol or diethylene glycol poisoning
Tests included:	Ethylene glycol, Diethylene glycol
Serum toxic level:	- Ethylene glycol: > 200 mg/L (Ref: Micromedex®) Remark: Levels < 200 mg/L may still indicate toxicity if significant time has passed since ingestion. - Diethylene glycol: not available
Note:	Prior arrangement with the laboratory is necessary. (Tel: 29901941)
Limitation:	Quantitative analysis of ethylene glycol and diethylene glycol is limited to blood specimen only. Analysis of other products is only qualitative. Blood specimens should be collected before haemodialysis.

Gamma-Hydroxybutyrate (GHB) Quantitative/Qualitative Analysis

Specimen:	- 20 mL spot urine (quantitative) - Non-biological specimen (qualitative) (as much as possible) e.g. unknown liquid
Container:	- Plain bottle (no preservative including boric acid) for urine - Plain bottle or original container with package insert (preferred) for non-biological specimen
Request form:	TRL Request form (PMH710 updated on 01/June/2022)
Turnaround time:	1 week
Indication:	Suspected GHB poisoning
Test(s) included:	GHB
Reference range:	Cut-off level for endogenous GHB in urine is 10 mg/L (Ref: Guidelines for the forensic analysis of drugs facilitating sexual assault and other criminal acts. United Nations Office on Drugs and Crime. Dec 2011.)
Limitation:	In urine, GHB could be determined for less than 12 hours after exposure

Gelsemium Alkaloids Target Analysis

Specimen:	- 30 mL spot urine - Non-biological specimen (as much as possible):
Container:	- Plain bottle for urine - Original container with package insert (preferred) or individual container bag for non-biological specimen
Request form:	TRL request form (PMH710 updated on 01/June/2022)
Turnaround time:	1 – 2 weeks
Indication:	Suspected Gelsemine toxicity
Test(s) included:	Gelsemine, Gelsevirine, Humantenmine, Koumine Related Traditional Chinese medicine and plants include: Gelsemium elegans (斷腸草/葫蔓藤/鉤吻)

General Toxicology Screen

Specimen:	- 30 mL urine - 4 mL clotted blood - Non-biological specimen (as much as possible): • Proprietary Chinese medicine • Pharmaceutical products • Health products • Herbs (unused herb, plant, herbal remnant, herbal broth)
Container:	- Plain bottle (no preservative including boric acid) for urine - Plain bottle (no gel) for clotted blood - Original container with package insert (preferred) or individual container bag for non-biological specimen
Request form:	TRL Request form (PMH710 updated on 01/June/2022)
Turnaround time:	1 – 2 weeks
Indication:	Comprehensive toxicology screen and confirmation
Test(s) included:	Please refer to Appendix B
Limitation:	The assay only covers the drugs under our scope (refer to appendix B for coverage). The detection of a particular drug in urine vary significantly based on multiple factors including: dose, elimination half-life, urine pH, urine dilution, frequency of use, and time of last use.

Glycols Target Analysis

Specimen:	- 4 mL clotted blood - Non-biological specimen (as much as possible) e.g. Unknown liquid
Container:	- Plain bottle (no gel) for clotted blood - Original container with package insert (preferred) or plain bottle (no gel) for non-biological specimen
Request form:	TRL Request form (PMH710 updated on 01/June/2022)
Turnaround time:	1 – 2 days
Indication:	Suspected glycol poisoning
Tests included:	Ethylene glycol, Diethylene glycol, Triethylene glycol, 1,2-Propanediol, 1,2-Butanediol, 1,3-Butanediol, Glycolic acid (metabolite of Ethylene glycol)
Limitation:	Quantitative analysis of glycol is limited to ethylene glycol and diethylene glycol in blood specimen only. Analysis for other glycols is only qualitative.
Note:	Prior arrangement with the laboratory is necessary. (Tel: 29901941)

Grayanotoxin Target Analysis

Specimen: - 30 mL spot urine
- Non-biological specimen (as much as possible):
  - Plant, honey

Container: - Plain bottle for urine
- Original container with package insert (preferred) or individual container bag for non-biological specimen

Request form: TRL request form (PMH710 updated on 01/June/2022)
Turnaround time: 1 – 2 weeks
Indication: Suspected Grayanotoxin toxicity
Test(s) included: Grayanotoxin III
Limitation: The analysis is qualitative only.

Heavy Metals Analysis

Specimen: - Biological specimen: Refer to the sample collection table below
- Non-biological specimen (as much as possible):
  - Facial products
  - Proprietary Chinese medicine
  - Health products
  - Herbs (Unused herb, herbal remnant, herbal broth)

Container: - Biological specimen:
  - Refer to the sample collection table below
- Non-biological specimen:
  - Original container with package insert (preferred) or individual container bag

Sample Collection:

Tests	Specimen	Container*	Volume required	Remark
Antimony, Serum	Blood	Acid washed, plain	3 mL	Avoid contamination during sample collection. Send to the laboratory immediately after collection.
Antimony, Urine	24 hour urine	24 hour urine special bottle	-	-
Cadmium, Urine	24 hour urine	24 hour urine special bottle	-	-
Cesium, Whole Blood	Blood	BD royal blue capped EDTA tube for trace element	3 mL	-
Cesium, Spot urine	Spot urine	Spot urine special bottle	20 mL	-

Tests	Specimen	Container*	Volume required	Remark
Chromium, Serum	Blood	BD royal blue capped plain tube for trace element	3 mL	Send to the laboratory immediately after collection.
Chromium, Whole Blood	Blood	BD royal blue capped EDTA tube for trace element	3 mL	-
Chromium, Urine	24 hour urine	24 hour urine special bottle	-	-
Cobalt, Whole blood	Blood	BD royal blue capped EDTA tube for trace element	3 mL	-
Cobalt, Urine	24 hour urine	24 hour urine special bottle	-	-
Nickel, Serum	Blood	BD royal blue capped plain tube for trace element	3 mL	Send to the laboratory immediately after collection.
Nickel, Urine	24 hour urine	24 hour urine special bottle	-	-
Silver, Serum	Blood	Light-shielded BD royal blue capped plain tube for trace element	3 mL	**Protect from light** in the light-shielded special bottle provided**.** Send to the laboratory immediately after collection.
Silver, Urine	24 hour urine	Light-shielded 24 hour urine special bottle	-	**Protect from light** in the light-shielded special bottle provided**.** Send to the laboratory immediately after collection.
Thallium, Whole Blood	Blood	BD royal blue capped EDTA tube for trace element	3 mL	Send to the laboratory immediately after collection.
Thallium, Urine	24 hour urine	24 hour urine special bottle	-	Send to the laboratory immediately after collection.

* Special containers are available in TRL

Request form: TRL Request form (PMH710 updated on 01/June/2022)

Turnaround time: Biological sample: 14 working days

Non-biological sample: 1 month

Indication: Urine Cadmium: Useful for monitoring of chronic exposure and assessment of total cadmium burden.

Non-biological sample: To identify the source of exposure in confirmed heavy metal poisoning

Test(s) included: Biological: Serum and Urine Antimony,
Urine Cadmium,
Whole Blood and Spot Urine Cesium,
Whole Blood, Serum and Urine Chromium,
Whole blood and Urine Cobalt,

		Serum and Urine Nickel, Serum and Urine Silver, Whole Blood and Urine Thallium
	Non-biological:	Arsenic, Cadmium, Cesium, Chromium, Cobalt, Copper, Lead, Manganese, Mercury, Nickel, Selenium and Thallium
Reference interval:	Serum antimony:	<1.8 nmol/L
	Urine antimony:	<6.5 nmol/24h
	Urine cadmium:	≤28.5 nmol/24h
	Whole Blood cesium:	<75.2 nmol/L
	Spot urine cesium:	<150 nmol/L
	Serum chromium:	≤27 nmol/L
	Whole blood chromium:	<40 nmol/L
	Urine chromium:	≤38.5 nmol/24h
	Whole blood cobalt:	<50 nmol/L
	Urine cobalt:	≤74.7 nmol/24h
	Serum nickel:	<34.1 nmol/L
	Urine nickel:	≤275 nmol/24h
	Serum silver:	<18.5 nmol/L
	Urine silver:	≤15 nmol/24h
	Whole blood thallium:	≤5 nmol/L
	Urine thallium:	≤20 nmol/24h
Limitation:	Refer to Remark in Sample Collection section above.	

Note: Biological sample: Prior arrangement with the laboratory is necessary. (Tel: 29901941)

Herb and Herbal Formula Identification

Specimen:
- Herbs (unused herb, plant or herbal remnant)
- Herbal formulae
- Proprietary Chinese medicine package inserts

Container: Individual container bag
Request form: TRL Request form (PMH710 updated on 01/June/2022)
Turnaround time: 1 – 2 weeks
Indication: Suspected herb related toxicity

Muscarine Target Analysis

Specimen:	- 30 mL spot urine - Non-biological specimen (as much as possible) e.g. Mushroom - Proprietary Chinese medicine package inserts
Container:	- Plain bottle (no preservative including boric acid) for urine - Individual container bag for non-biological specimen
Request form:	TRL Request form (PMH710 updated on 01/June/2022)
Turnaround time:	1 week
Indication:	Suspected cholinergic syndrome after ingestion of mushrooms (e.g. certain species of Clitocype, Inocybe and Mycena)
Test(s) included:	Muscarine

Methaemoglobinaemia-inducing Agents Screen

Specimen:	- 30 mL urine - Non-biological specimen (as much as possible): • Proprietary Chinese medicine • Pharmaceutical products • Health products • Food • Others
Container:	- Plain bottle (no preservative including boric acid) for urine - Original container with package insert (preferred) or individual container bag for non-biological specimen
Turnaround time:	1 – 2 weeks
Indication:	Suspected drug, herb, chemical or food-induced methaemoglobinaemia
Test(s) included:	<u>Urine</u> Aniline, Benzocaine, Chloroquine, Dapsone, 2,4-Dinitrophenol, Flutamide, Hydroquinone, Indoxacarb, Lidocaine, Menthol, Metoclopramide, Naphthalene, Nitrate*, Paraquat*, Phenacetin, Phenazopyridine, Phenytoin, Prilocaine, Primaquine, Procaine, Sulfamethazine, Sulfamethoxazole, Sulfapyridine, Sulfasalazine, Sulfathiazole, Trimethoprim and Zopiclone <u>Non-biological specimens</u> Aniline, Benzocaine, Chloroquine, Dapsone, 2,4-Dinitrophenol, Flutamide, Indoxacarb, Lidocaine, Metoclopramide, Naphthalene, Nitrate*, Nitrite*, Nitrobenzene[$], Paraquat*, Phenacetin, Phenazopyridine Phenytoin, Prilocaine, Primaquine, Procaine, Sulfamethazine, Sulfamethoxazole, Sulfapyridine, Sulfasalazine, Sulfathiazole,

Trimethoprim and Zopiclone
* Analytes requiring special test. Please indicate clearly in the request form.
$ Applicable to liquid products only.

Note: The above list of methaemoglobinaemia-inducing agents is not exhaustive

Nitrate and Nitrite Quantitative Analysis

Specimen:	- 30 mL spot urine - Non-biological specimen (as much as possible) e.g. Vegetables, soup, congee
Container:	- Plain bottle (no preservative including boric acid) for urine - Original container of food or plain bottle
Request form:	TRL request form (PMH710 updated on 01/June/2022)
Turnaround time:	1 – 2 weeks
Indication:	Suspected nitrate and/or nitrite induced methaemoglobinaemia
Tests included:	Nitrate, Nitrite

3-Nitropropionic Acid Target Analysis

Specimen:	- 20 mL spot urine - Sugarcane (as much as possible)
Container:	- Plain bottle (no preservative including boric acid) for urine - Individual container bag for sugarcane
Request form:	TRL Request form (PMH710 updated on 01/June/2022)
Turnaround time:	1 – 2 weeks
Indication:	Suspected poisoning by ingesting mouldy sugarcane
Test(s) included:	3-Nitropropionic acid

Oral Antidiabetic Agents Target Analysis

Specimen:	30 mL spot urine
Container:	Plain bottle (no preservative including boric acid)
Request form:	TRL Request form (PMH710 updated on 01/June/2022)
Turnaround time:	1 week
Indication:	Suspected unexplained drug-induced hypoglycaemia
Test(s) included:	Alogliptin, Canagliflozin, Chlorpropamide, Dapagliflozin, Empagliflozin, Glibenclamide, Gliclazide, Glimepiride, Glipizide, Gliquidone, Ipragliflozin,

Linagliptin, Metformin, Nateglinide, Phenformin, Pioglitazone, Repaglinide, Saxagliptin, Sitagliptin, Tofogliflozin, Tolazamide, Tolbutamide and Vildagliptin.

Limitation: The analysis is qualitative only.

Paraquat and Diquat Analysis

Specimen:
- 20 mL spot urine
- Non-biological specimen (as much as possible)
  e.g. herbicides liquid, powder.

Container:
- Plain bottle (no preservative including boric acid) for urine
- Original container with package insert (preferred) or individual container bag for non-biological specimen

Request form: TRL Request form (PMH710 updated on 01/June/2022)

Turnaround time: 1 – 2 weeks

Indication: Suspected paraquat poisoning

Test(s) included: Paraquat, diquat and their metabolite(s)

Pesticide Target Analysis

Specimen:
- 30 mL urine
- 4 mL clotted blood
  (For referring laboratory: please separate serum from red cells by centrifugation as soon as possible and send only serum to TRL. Store serum and urine at 4ºC and protect sample from light if sample is not sent out immediately)
- Non-biological specimen (as much as possible)
  e.g. Insecticide liquid, powder.

Container:
- Plain bottle (no preservative including boric acid) for urine
- Plain bottle (no gel) for clotted blood
- Original container with package insert (preferred) or individual container bag for non-biological specimen

Request form: TRL Request form (PMH710 updated on 01/June/2022)

Turnaround time: 1 – 2 weeks

Indication: Suspected Insecticide poisoning

Test(s) included: (E)-Metominostrobin, (Z)-Metominostrobin, 1,4-Dichlorobenzene, 2-Phenylphenol, 3-phenoxybenzaldehyde, 3-Phenoxybenzoic acid, 6-Pyrimidinol,2-isopropyl-4-methyl (Diazinon metabolite), Acephate, Acetochlor, Allethrin, alpha-Endosulfan, Ametryn, Atrazine, Azaconazole, Benalaxyl, Benfluralin, Benoxacor, beta-Endosulfan, Bromacil, Bromobutide, Bromopropylate, Bupirimate, Buprofezin, Camphor, Carbofuran, Chlorpyriphos-methyl, Chlorthal-dimethyl, Clomazone, Cyanophos, Cypermethrin,

DEET, Deltamethrin, Diazinon, Dichlorvos, Diclofop-methyl, Dicloran, Dimepiperate, Dimethametryn, Dimethoate, Diphenamid, Empenthrin, Ethion, Ethofumesate, Fenamiphos, Fenbuconazole, Fenitrothion, Fenothiocarb, Fenpropathrin, Fenpropimorph, Fenvalerate, Fipronil, Flamprop-methyl, Fluacrypyrim, Flumiclorac-pentyl, Flumioxazin, Flutriafol, Glyphosate*, Heptachlor, Hexazinone, Imazamethabenz methyl, Imidacloprid*, Imiprothrin, Indoxacarb, Iprobenfos, Isazophos, Isomalathion, Isoprothiolane, Isoxathion, Isoxathion oxon, Malathion, Metalaxyl, Methidathion, Methomyl, Methoprene, Methoxychlor, MGK 264, Mirex, Monocrotophos, Naphthalene, Napropamide, Nitrothal-isopropyl, Norflurazon, O,O,S-Trimethylphosphorodithionate, o,p'-DDD, o,p'-DDD, Omethoate, Oxadiazon, Oxadixyl, Oxyfluorfen, p,p'-DDD, p,p'-DDE, p,p'-DDT, Paraquat*, Permethrin, Phenothrin, Phorate, Phosmet, Phosphamidon, Phthalide, Piperonyl butoxide, Piperophos, Prometryn, Propachlor, Propanil, Propargite, Propoxur, Propyzamide, Pyrazophos, Pyrethrin, Pyridaphenthion, Quinoclamine, Quinoxyfen, Simazine, Sulfotep, Tecnazene, Tetrachlorvinphos, Tetradifon, Tetramethrin, Tolfenpyrad, Transfluthrin, Triadimefon, Tri-allate, Tribufos, Trichlorfon, Trifloxystrobin, Vinclozolin, XMC

*Analytes requiring special test. Please indicate clearly in the request form.

Limitation: Some pesticides are not stable at room temperature and some are photo-degradable. Special caution is required for specimen collection and processing.

QT-Prolonging Agents Screen

Specimen:
- 30 mL Urine
- Non-biological specimen (as much as possible):
  - Proprietary Chinese medicine
  - Pharmaceutical products
  - Health products

Container: Plain bottle (no preservative including boric acid) for urine
Individual container bag for non-biological specimen

Request form: TRL Request form (PMH710 updated on 01/June/2022)

Turnaround time: 1 – 2 weeks

Indication: Suspected drug/herb induced prolonged QT interval

Test(s) included: <u>Urine</u>

Albuterol, Alfuzosin, Amantadine, Amiodarone, Amisulpride, Amitriptyline, Amphetamine, Astemizole, Atomoxetine, Azelastine, Azithromycin, Bepridil, Cesium, Chloroquine, Chlorpromazine, Cisapride, Citalopram, Clarithromycin, Clemastine, Clomipramine, Clozapine, Diphenhydramine, Disopyramide, Dofetilide, Dolasetron, Domperidone, Droperidol, Erythromycin, Escitalopram, Fexofenadine, Flecainide,

Fluconazole, Granisetron, Halofantrine, Haloperidol, Ibutilide, Imipramine, Ketoconazole, Maprotiline, Matrine, Mefloquine, Mesoridazine, Metaproterenol (Orciprenaline), Methadone, Methamphetamine, Mizolastine, Nilotinib, Nortriptyline, Ondansetron, Paliperidone, Penfluridol, Pentamidine, Phentermine, Pimozide, Probucol, Procainamide, Quetiapine, Quinidine, Ranolazine, Risperidone, Roxithromycin, Salbutamol / Levosalbutamol (Levalbuterol), Sertindole, Sibutramine, Sotalol, Sparfloxacin, Sunitinib, Sulfamethoxazole, Terfenadine, Thioridazine, Tizanidine, Trimethroprim, Vardenafil, Venlafaxine, Verapamil, Ziprasidone

Non-biological specimens

Albuterol, Alfuzosin, Amiodarone, Amisulpride, Amitriptyline, Amphetamine, Astemizole, Atazanavir, Atomoxetine, Azelastine, Azithromycin, Bepridil, Cesium, Chloroquine, Chlorpromazine, Cisapride, Citalopram, Clarithromycin, Clemastine, Clomipramine, Clozapine, Diphenhydramine, Disopyramide, Dofetilide, Dolasetron, Domperidone, Droperidol, Erythromycin, Escitalopram, Fexofenadine, Flecainide, Fluconazole, Gemifloxacin, Granisetron, Halofantrine, Haloperidol, Ibutilide, Imipramine, Ketoconazole, Lapatinib, Levofloxacin, Maprotiline, Matrine, Mefloquine, Mesoridazine, Metaproterenol (Orciprenaline), Methadone, Methamphetamine, Mizolastine, Moxifloxacin, Nilotinib, Nortriptyline, Ondansetron, Paliperidone, Penfluridol, Pentamidine, Phentermine, Pimozide, Procainamide, Quetiapine, Quinidine, Ranolazine, Risperidone, Ritonavir, Roxithromycin, Salbutamol / Levosalbutamol (Levalbuterol), Sematilide, Sertindole, Sibutramine, Sotalol, Sparfloxacin, Sulfamethoxazole, Sunitinib, Tacrolimus, Terfenadine, Thioridazine, Tizanidine, trimethoprim, Vardenafil, Venlafaxine, Verapamil, Voriconazole, Ziprasidone

- Agents with known QT prolongation risks that are **not** covered by our analytical system:
  Urine:
  Arsenic trioxide, Levomethadyl, Pentamidine
  Non-biological specimens:
  Arsenic trioxide, Levomethadyl

- Agents with potential QT prolongation risks that are **not** covered by our analytical system:
  Urine:
  Azimilide, Dronedarone, Foscarnet, Fosphenytoin, Grepafloxacin, Lithium, Perflutren lipid microspheres, Ritonavir, Sematilide, Tacrolimus, Telithromycin, Voriconazole

Non-biological specimens:
Azimilide, Dronedarone, Foscarnet, Fosphenytoin, Grepafloxacin, Lithium, Perflutren lipid microspheres, Telithromycin

Note: The above lists are not exhaustive and would expect to change with time.

Sodium Monofluoroacetate (SMFA), Fluoroacetamide and Fluoroacetic acid

Target analysis

Specimen:
- 10 mL spot urine
- Non-biological specimens (as much as possible)
  - Liquid form product
  - Solid form product (e.g. Powder, baits, etc.)

Container:
- Plain bottle (no preservative) for urine
- Individual container bag for non-biological specimen

Request form: TRL request form (PMH710 updated on 01/June/2022)

Turnaround time: 3 working days

Indication: Suspected ingestion, inhalation or dermal absorption of fluoroacetates-containing rodenticides e.g. 王中王, 聞到死, or neat solution of rodenticides

Test(s) included: Sodium monofluoroacetate (SMFA)
Fluoroacetamide (FAA)
Fluoroacetic acid

Limitation: For non-biological samples: Signal suppression of SMFA was observed with non-biological samples containing chlorpyrifos. Comment will be added for these cases.
For urine: Fluroacetic acid is the metabolite of both SMFA and FAA. Its presence in urine indicates the exposure of SMFA and/or FAA, which per se cannot be differentiated.

Superwarfarins and Warfarin Target Analysis

Specimen:
- 30 mL spot urine
- 4 mL clotted blood
- Non-biological specimen (as much as possible)
  e.g. Rodenticides
  - For new case of suspected superwarfarins/warfarin poisoning, please send both urine and clotted blood.

- For follow-up case of confirmed superwarfarin poisoning, please send clotted blood.

Container:
- Plain bottle (no preservative including boric acid) for urine
- Plain bottle (no gel) for clotted blood
- Original container with package insert (preferred) or individual container bag for non-biological specimen

Request form: TRL Request form (PMH710 updated on 01/June/2022)

Turnaround time: 1 – 2 weeks

Indication: Suspected superwarfarins/warfarin poisoning

Test(s) included: Brodifacoum, Bromadiolone, Chlorphacinone, Coumachlor, Coumafuryl, Coumatetralyl, Difenacoum, Difethalone, Diphacinone, Flocoumafen, Pindone, Warfarin and Warfarin metabolite

Limitation: Owing to structural similarity among analyte groups, non-specificity was observed when the detection level is high. The following table shows the percentage non-specificity of analyte standard at 200 times LOD level. Any interfering signal contributed to below 1% signal of the analyte will not be reported.

Compound	Non-specific compound	Cross reactivity (%)
Brodifacoum	Dicoumarol	0.43
	Difenacoum	0.72
	Difethialone	0.06
Chlorophacinone	Diphacinone	0.15
Coumachlor	Warfarin	0.01
Coumafuryl	Warfarin	0.52
Difethialone	Flocoumafen	0.30
Pindone	Warfarin	0.50

Tetramine Target Analysis

Specimen:
- 30 mL urine
- 4 mL clotted blood
- Non-biological specimen (as much as possible)
  e.g. Rodenticides

Container:
- Plain bottle (no preservative including boric acid) for urine
- Plain bottle (no gel) for clotted blood
- Original container with package insert (preferred) or individual container bag for non-biological specimen

Request form: TRL Request form (PMH710 updated on 01/June/2022)

Turnaround time: 1 – 2 days

Indication:	Suspected tetramine poisoning
Test(s) included:	Tetramine
Note:	Prior arrangement with the laboratory is necessary. (Tel: 29901941)

Tetrodotoxin Target Analysis

Specimen:	- 20 mL urine - Fish specimen (as much as possible)
Container:	- Plain bottle (no preservative including boric acid) for urine - Individual container bag for fish specimen
Request form:	TRL Request form (PMH710 updated on 01/June/2022)
Turnaround time:	1 week
Indication:	Suspected puffer fish poisoning
Test(s) included:	Tetrodotoxin

Therapeutic Drug Monitoring for Psychotropic Drugs

Specimen:	4 mL clotted blood (For referring laboratory: please send only serum to TRL after centrifugation. Store serum at -20ºC and transport to TRL *on ice* within one week.)
Container:	Plain bottle (no gel)
Collection:	Trough level (within 2 h before next dose) at steady state. Acute overdose is an exception.
Request form:	TRL request form of therapeutic drug monitoring (PM797 updated on 08/2019)
Turnaround time:	7 working days (counting from specimen arrival to TRL); 1 – 2 working days for urgent cases if clinically indicated
Indication:	- Poor clinical response with adequate dose - Suspected adverse effects at recommended dose - Suspected non-compliance - Suspected drug interactions - Children and adolescents - Elderly - Co-morbidities that affect drug metabolism (e.g. hepatic or renal insufficiency) - Drug overdose / risk of intoxication

Test(s) included:

Test:	**Measured analyte(s):**
Amitriptyline	Amitriptyline + Nortriptyline*
Nortriptyline	Nortriptyline
Clomipramine	Clomipramine + Norclomipramine*
Imipramine	Imipramine + Desipramine*
Clozapine	Clozapine

*Active metabolite

Therapeutic range:

Test:	**Therapeutic Range ^:**
Amitriptyline + Nortriptyline	80-200 μg/L
Nortriptyline	70-170 μg/L
Clomipramine + Norclomipramine	230-450 μg/L
Imipramine + Desipramine	175-300 μg/L
Clozapine	350-600 μg/L

^Ref: Pharmacopsychiatry 2018;51:9-62

Critical call result:

Test:	**Critical Call Result:**
Amitriptyline + Nortriptyline	>500 μg/L
Nortriptyline	>500 μg/L
Clomipramine + Norclomipramine	>500 μg/L
Imipramine + Desipramine	>500 μg/L
Clozapine	>1000 μg/L

Charge: Charges will be incurred for this test with unit price HK$350. Please contact the laboratory (Tel: 29901941) for details.

Limitation: The therapeutic range provided is for trough steady-state level. If the patient's blood sample was not collected at trough level (i.e. immediately before next dose), the drug level measured could be higher than the real trough level.

Toxic Alcohols Quantitative/Qualitative Analysis

***Caution :** **Non-alcoholic germicide solution should be used as disinfectant for blood taking. In case alcohol swap is used to sterilse the blood collecction site, the site should be completely dry befrore blood taking.**

Specimen :
- 4 mL clotted blood (quantitative)
- 30 mL urine (qualitative)
- Non-biological samples (qualitative) (as much as possible)
  e.g. detergent, solvent, wine, unknown liquid

Container:
- Plain bottle (no gel) for clotted blood
- Plain bottle (no preservative including boric acid) for urine
- Original container with package insert (preferred) or plain bottle for non-biological specimen

Request form: TRL Request form (PMH710 updated on 01/June/2022)

Turnaround time: 1 – 2 days

Indication: Suspected toxic alcohol poisoning

Test(s) included: Methanol, Ethanol, Isopropanol and Acetone

Serum toxic level:

Methanol:	> 6.24 mmol/L (20 mg/dL)
Ethanol:	> 17.36 mmol/L (80 mg/dL)
Isopropanol:	> 6.66 mmol/L (40 mg/dL)
Acetone:	> 3.44 mmol/L (20mg/dL)

Limitation: The quantitative analysis of toxic alcohols is limited to blood specimen only. Analysis of urine and other products is only qualitative.

Note:
- Prior arrangement with the laboratory is necessary. (Tel: 29901941)
- If downtime of service exceeds 5 days, Qualitative screening of Toxic Alcohols will be provided only.

Toxic Plant/Herbal Alkaloids Target Analysis

Specimen:
- 30 mL urine
- 4 mL clotted blood
- Non-biological specimen (as much as possible):
  - Proprietary Chinese medicine
  - Pharmaceutical products
  - Health products
  - Herbs (unused herb, plant, herbal remnant or herbal broth)

Container:
- Plain bottle (no preservative including boric acid) for urine
- Plain bottle (no gel) for clotted blood
- Original container with package insert (preferred) or individual container bag for non-biological specimen

Request form: TRL Request form (PMH710 updated on 01/June/2022)

Turnaround time: 1 – 2 weeks

Indication: Suspected herb related toxicity

Test(s) included:

Aconitum alkaloids:
Aconitine, Mesaconitine, Hypaconitine, Yunaconitine, Crassicauline A, Benzoylaconine, Benzoylmesaconine, Benzoylhypaconine, Deacetyl-yunaconitine, Deacetyl-crassicauline A, Deoxyaconitine

Colchicum alkaloids:
Colchicine

Solanaceous (anticholinergic) alkaloids:
Atropine/ Hyoscyamine, Anisodamine, Scopolamine, Anisodine

Sophora alkaloids:
Matrine, Sophoridine, Oxymatrine, Cytisine, N-methylcytisine

Strychnos alkaloids :
Brucine, Strychnine

Limitation: Hyoscyamine is the levo isomer of the plant alkaloid tropine tropate while atropine is the racemix mixture of an equimixture of d- and l- tropine tropate. Atropine does not occur at all in the natural belladonna plant but is formed only in the process of isolation. The current assay could not differentiate atropine and hyoscyamine. Matrine and sophoridine are diastereomers that could not be differentiated by in our system. Their presence could only be identified by the ratio of ion fragments produced in our system.

Vitamin A Quantitative Analysis

Specimen:	4 mL clotted blood	
Container:	Plain bottle (no gel)	
Request form:	TRL Request form (PMH710 updated on 01/June/2022)	
Turnaround time:	1 – 2 weeks	
Indication:	Suspected vitamin A poisoning	
Test(s) included:	Vitamin A	
Reference interval:	< 1 y	0.5 – 1.5 µmol/L
	1 – 6 y	0.7–1.5 µmol/L
	7 – 12 y	0.9–1.7 µmol/L
	13 – 18 y	0.9–2.5 µmol/L
	Adult	1.0–3.0 µmol/L
	Risk of toxicity	> 4.5 µmol/L

(Ref: Scottish Trace Element and Micronutrient Diagnostic and Research Laboratory http://www.trace-elements.co.uk/vitamin-a.asp)

Note:	1. Prior arrangement with the laboratory is necessary. (Tel: 29901941) 2. Fasting sample is required. 3. Protect sample from light.
Limitation:	Unstable in light condition.

Volatile Organic Compounds Screen

Specimen:	Non-biological liquid specimen (as much as possible) e.g. Unknown liquid; solvent; cleansing agent
Container:	Original container with package insert (preferred) of the liquid or plain bottle
Request form:	TRL Request form (PMH710 updated on 01/June/2022)
Turnaround time:	1 – 2 days
Indication:	Suspected volatile organic compounds poisoning
Tests included:	Acetone, Acetonitrile, Benzene, Bromochloromethane, 2-Bromo-1-chloropropane, Bromodichloromethane, 4-Bromofluorobenzene, Bromomethane, 1-Butanol, 2-Butanone, 2-Butoxyethanol, 1-Butoxy-2-propanol, Chlorobenzene, Chloroethane, Chloroethene, 2-Chloroethyl vinyl ether, Chloromethane, Cyclohexane, Decane, Dibromochloromethane, 1,2-Dichlorobenzene. 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,4-Dichlorobutane, 1,1-Dichloroethane, 1,2-Dichloroethane,

1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Dichloromethane, 1,2-Dichloropropane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, N,N-Dimethylformamide, 1,4-Dioxane, Dodecane, Ethanol, 2-Ethoxyethanol, Ethyl acetate, Ethylbenzene, 2-Ethyltoluene, 3-Ethyltoluene, Fluorobenzene, Heptane, Hexadecane, Hexane. 2-Hexanone, Isobutanol, Isopropanol, Methanol, 2-Methoxyethanol, 1-Methoxy-2-propanol, Methylcyclohexane, Methylpyrrolidone, Nitrobenzene, Nitromethane, Nonane. Octane, Pentafluorobenzene, Phenol, Propanol (IS), 1-Propoxy-2-propanol, Pyridine, Tetrachloroethene, Tetrachloromethane, Tetradecane, Tetrahydrofuran, Tetralin, Toluene, 1,1,2,2-Tetrachloroethane, 1,3,5-Tribromobenzene, Tribromomethane, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 2,2,2-Trichloroethanol, Trichloroethene, Trichlorofluoromethane, Trichloromethane, 1,2,4-Trimethylbenzene, p-xylene/ m-xylene, O-Xylene

Limitation: The qualitative analysis of volatile organic compound is limited to non-biological specimen only. The performance specification for analysis of serum and urine are not evaluated.

Appendix A

Cluster Toxicology Laboratories

Distribution

Cluster	Site of CTL	Contact Persons	Telephone Numbers
HKW	QMH	Prof CW LAM	2255 5655
HKE	PYNEH	Dr WT POON	2595 5109
NTE	PWH	Dr Michael CHAN	3505 2326
NTW	TMH	Dr Michael LEE	2468 6391
KE	UCH	Dr Angel CHAN	3949 3535
KW	PMH	Dr Doris CHING	2990 1881
KC	QEH	Dr Sammy CHEN	3506 6682

Roles

Emergency toxicology service
General toxicology screen
Common substances of abuse analysis service
Consultation and interpretation related to the above service

Appendix B

Coverage of General Toxicology Screen

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
ACE Inhibitors	Captopril	B
	Enalapril	B, NB
	Fosinopril	B, NB
	Imidapril	B, NB
	Lisinopril	B
	Moexipril	B, NB
	Perindopril	B
	Perindopril metabolite(s)	B
	Ramipril	B, NB
	Zofenopril	B, NB
Alpha-1 Blockers	Alfuzosin	B, NB
	Alfuzosin metabolite(s)	B
	Doxazosin	B, NB
	Phentolamine	B
	Phentolamine methanesulphonate	NB
	Prazosin	B, NB
	Tamsulosin	B, NB
	Terazosin	B, NB
	Terazosin metabolite(s)	B
Amphetamines	Amphetamine	B, NB
	4-Hydroxyamphetamine	B, NB
	MDA ((+)-3,4-Methylene-dioxy-amphetamine)	B, NB
	MDMA ((+)-3,4-Methylene-dioxy-methamphetamine)	B, NB
	Methamphetamine	B, NB
Anabolic Steroids	5-Androstenediol	B, NB
	1-Androstenedione	B, NB
	4-Androstenedione	B, NB
	Bolandione	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Anabolic Steroids	Boldenone	B, NB
	Boldenone metabolite(s)	B
	Boldenone acetate	B, NB
	Boldenone undecylenate	B, NB
	Boldione	B, NB
	Chlorodehydromethylandrostenediol (CDMA)	B, NB
	Clostebol	B, NB
	Clostebol metabolite(s)	B
	Clostebol acetate	B, NB
	Dehydroepiandrosterone (DHEA)	B, NB
	DHEA metabolite(s)	B
	Drostanolone	B
	Drostanolone metabolite(s)	B
	Epiboldenone	B, NB
	Epinandrolone	B, NB
	Epitestosterone	B, NB
	4,6-Estradiene-3,17-dione	B, NB
	Fluoxymesterone	NB
	Fluoxymesterone metabolite(s)	B
	Mesterolone	B
	Metandienone	NB
	Methandriol	B, NB
	Methasterone	B
	Methenolone	B, NB
	Methenolone metabolite(s)	B
	Methenolone acetate	B, NB
	Methenolone enanthate	B
	Methyl-1-testosterone	B, NB
	Methyltestosterone	B, NB
	Methyltestosterone metabolite(s)	B
	17-alpha-Methyltestosterone	B
	Nandrolone	B, NB
	Nandrolone metabolite(s)	B

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Anabolic Steroids	Nandrolone decanoate	B
	Norbolethone	B, NB
	19-Norclostebol	B, NB
	Oxandrolone	B
	Oxandrolone metabolite(s)	B
	Oxymetholone	B, NB
	Stanozolol	B, NB
	Stanozolol metabolite(s)	B
	Testosterone	B
	Testosterone metabolite(s)	B
	Testosterone acetate	B, NB
	Testosterone cypionate	B, NB
	Testosterone enanthate	B, NB
	Testosterone isocaproate	B, NB
	Testosterone phenylpropionate	B, NB
	Testosterone propionate	B, NB
	Testosterone undecanoate	B
	Testosterone valerate	B, NB
	Trenbolone	B, NB
	Trenbolone metabolite(s)	B
	Trenbolone acetate	B, NB
	Trenbolone enanthate	NB
	Trenbolone hexahydrobenzylcarbonate	B, NB
Anaesthetics	Alfentanil	B, NB
	Alfentanil metabolite(s)	B
	Amethocaine (Tetracaine)	B, NB
	Benzocaine	B, NB
	Bupivacaine	B, NB
	Bupivacaine metabolite(s)	B
	Cinchocaine	B, NB
	Etomidate	B
	Ketamine	B, NB
	Ketamine metabolite(s)	B
	Lidocaine	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Anaesthetics	Lidocaine metabolite(s)	B
	Mepivacaine	B
	Oxetacaine (Oxethazaine)	B
	Prilocaine	B, NB
	Procaine	B, NB
	Propofol	NB
	Propofol metabolite(s)	B
	Quinol	B
	Ropivacaine	B, NB
	Sufentanil	B, NB
	Sufentanil metabolite(s)	B
	Tetracaine (Amethocaine)	B, NB
	Thiopental	B, NB
	Xylazine	B
	Zolazepam	B
Analgesics (Non-Opioid) & Antipyretics	Aminopyrine	B
	Dipyrone	NB
	Glafenine	B, NB
	Methyl salicylate	B, NB
	Nefopam	B, NB
	Noramidopyrine	NB
	Paracetamol	B, NB
	Phenacetin	B, NB
	Phenylsalicylate	B, NB
	Propyphenazone	B, NB
	Propyphenazone metabolite(s)	B
	Salicylamide	B, NB
	Salicylamide metabolite(s)	B
	Salicylic acid	B, NB
	Xylazine	B
Analgesics (Opioid)	Buprenorphine	B, NB
	Buprenorphine metabolite(s)	B
	Butorphanol	B
	Codeine	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Analgesics (Opioid)	Codeine metabolite(s)	B
	Dextropropoxyphene (Propoxyphene)	B, NB
	Dihydrocodeine	B, NB
	Dihydromorphine	B, NB
	Diphenoxylate	B, NB
	Diphenoxylate metabolite(s)	B
	Ethyl morphine	B, NB
	Fentanyl	B, NB
	Fentanyl metabolite(s)	B
	Hydrocodone	B, NB
	Hydrocodone metabolite(s)	B
	Hydromorphone	B, NB
	Methadone	B, NB
	Methadone metabolite(s)	B
	Morphine	B, NB
	Morphine metabolite(s)	B
	Nalbuphine	B
	Oxycodone	B, NB
	Oxycodone metabolite(s)	B
	Oxymorphone	B, NB
	Pentazocine	B, NB
	Pethidine (Meperidine)	B, NB
	Pethidine (Meperidine) metabolite(s)	B
	Propoxyphene (Dextropropoxyphene)	B, NB
	Propoxyphene (Dextropropoxyphene) metabolite(s)	B
	Remifentanil metabolite(s)	B
	Tapentadol	B
	Tapentadol metabolite(s)	B
	Tramadol	B, NB
	Tramadol metabolite(s)	B
Androgens & Related Synthetic Drugs	Danazol	B, NB
	Methyltestosterone	B, NB
	17-alpha-Methyltestosterone	B

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Androgens & Related Synthetic Drugs	Testosterone	NB
	Testosterone decanoate / isocaproate/ propionate / phenylpropionate	B, NB
Angiotensin II Antagonists	Candesartan cilexetil	B, NB
	Eprosartan	B
	Irbesartan	B, NB
	Irbesartan metabolite(s)	B
	Losartan	B, NB
	Olmesartan	B
	Telmisartan	B, NB
	Valsartan	B, NB
Animal Toxins	Arenobufagin	B, NB
	Bufotalin	B, NB
	Bufotenine	B, NB
	Cantharidin	B
	Cinobufotalin	B, NB
Antacids, Antireflux Agents & Antiulcerants	Carbenoxolone	NB
	Cimetidine	B, NB
	Esomeprazole / Omeprazole	B, NB
	Famotidine	B, NB
	Lansoprazole	B, NB
	Lansoprazole metabolite(s)	B
	Omeprazole / Esomeprazole	B, NB
	Omeprazole metabolite(s) / Esomeprazole metabolite(s)	B
	Oxetacaine (Oxethazaine)	B
	Oxethazaine	B, NB
	Pantoprazole	B, NB
	Pantoprazole metabolite(s)	B
	Pirenzepine	B, NB
	Rabeprazole	B, NB
	Rabeprazole metabolite(s)	B
	Ranitidine	B, NB
	Ranitidine metabolite(s)	B

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Anthelmintics	Levamisole	B, NB
	Mebendazole	B, NB
	Praziquantel	B
	Pyrantel	NB
	Thiabendazole	NB
Antiamoebics	Diloxanide	NB
	Diloxanide furoate	B, NB
	Emetine	B, NB
	Metronidazole	B, NB
	Tinidazole	B, NB
Anti-Anginal Drugs	Amlodipine	B, NB
	Amlodipine metabolite(s)	B
	Atenolol	B, NB
	Diltiazem	B, NB
	Diltiazem metabolite(s)	B
	Felodipine	B, NB
	Isosorbide dinitrate	B, NB
	Isosorbide mononitrate	NB
	Ivabradine	B
	Ivabradine metabolite(s)	B
	Nifedipine	B, NB
	Nifedipine metabolite(s)	B
	Perhexiline	B
	Ranolazine	B, NB
	Trimetazidine	B
	Verapamil	B, NB
	Verapamil metabolite(s)	B
Antiasthmatic & COPD Preparations	Aminophylline	NB
	Bambuterol	B
	Beclomethasone	B, NB
	Betamethasone	B, NB
	Budesonide	B, NB
	Clenbuterol	B, NB
	Diprophylline (Dyphylline)	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Antiasthmatic & COPD Preparations	Fenoterol	NB
	Fluticasone propionate	B, NB
	Formoterol	NB
	Ipratropium	B, NB
	Isoprenaline (Isoproterenol)	B, NB
	Ketotifen	B, NB
	Metaproterenol (Orciprenaline)	B, NB
	Methoxyphenamine	B, NB
	Montelukast	NB
	Olodaterol	B
	Procaterol	B, NB
	Reproterol	B, NB
	Salbutamol / Levosalbutamol (Levalbuterol)	B, NB
	Salmeterol	NB
	Terbutaline	B, NB
	Terbutaline metabolite(s)	B
	Theophylline	B, NB
	Tiotropium	B, NB
	Tulobuterol	B, NB
Anticholinergics	Atropine / Hyoscyamine	B, NB
	Benzhexol	B, NB
	Benzhexol metabolite(s)	B
	Benztropine	B, NB
	N-Butyl-scopolamine (Buscopan)	B
	Clidinium	NB
	Cyclopentolate	NB
	Dicyclomine	B
	Dicycloverine	B
	Flavoxate	B, NB
	Homatropine	B, NB
	Hyoscine butylbromide	NB
	Hyoscine methobromide	NB
	Hyoscyamine / Atropine	B, NB
	Hyoscyamine	B

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Anticholinergics	Ipratropium	B, NB
	Methylscopolamine	B
	Oxybutynin	B
	Pirenzepine	B, NB
	Propantheline	B, NB
	Propiverine	B
	Scopolamine	B, NB
	Solifenacin	B, NB
	Tiotropium	B, NB
	Tolterodine	NB
	Trimebutine	NB
	Tropicamide	NB
Anticoagulants, Antiplatelets & Fibrinolytics	Apixaban	B
	Aspirin (Acetylsalicylic Acid)	B, NB
	Cilostazol	B, NB
	Clopidogrel	B, NB
	Clopidogrel metabolite(s)	B
	Coumarin	B
	Dabigatran	B
	Dabigatran etexilate	NB
	Dicoumarol	NB
	Dipyridamole	B, NB
	Disopyramide	B, NB
	Edoxaban	NB
	Rivaroxaban	B, NB
	Ticagrelor	B
	Ticlopidine	B, NB
	Warfarin	B, NB
	Warfarin metabolite(s)	B
Anticonvulsants	Acetazolamide	B, NB
	Allobarbital	B
	Carbamazepine	B, NB
	Carbamazepine metabolite(s)	B
	Chlormethiazole	B

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Anticonvulsants	Clobazam	B, NB
	Clobazam metabolite(s)	B
	Clonazepam	B, NB
	Clonazepam metabolite(s)	B
	Diazepam	B, NB
	Diazepam metabolite(s)	B
	Ethosuximide	B, NB
	Fosphenytoin	NB
	Gabapentin	B
	Lacosamide	B
	Lamotrigine	B, NB
	Lamotrigine metabolite(s)	B
	Levetiracetam	B, NB
	Lorazepam	B, NB
	Lorazepam metabolite(s)	B
	Midazolam	B, NB
	Midazolam metabolite(s)	B
	Oxcarbazepine	B, NB
	Perampanel	B, NB
	Phenobarbital	B, NB
	Phenytoin	B, NB
	Phenytoin metabolite(s)	B
	Pregabalin	B
	Primidone	B, NB
	Retigabine	B
	Topiramate	B
	Valproic acid	B
	Valproic acid metabolite(s)	B
	Valpromide	B, NB
	Zonisamide	B, NB
Antidepressants	Agomelatine	B
	Amitriptyline	B, NB
	Amitriptyline metabolite(s)	B
	Amoxapine / Loxapine metabolite(s)	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Antidepressants	Bupropion	B, NB
	Bupropion metabolite(s)	B
	Citalopram	B, NB
	Citalopram metabolite(s)	B
	Clomipramine	B, NB
	Clomipramine metabolite(s)	B
	Desipramine	B, NB
	Desvenlafaxine	B
	Dothiepin (Dosulepin)	B, NB
	Dothiepin metabolite(s)	B
	Doxepin	B, NB
	Doxepin metabolite(s)	B
	Duloxetine	B, NB
	Escitalopram	B, NB
	Fluoxetine	B, NB
	Fluoxetine metabolite(s)	B
	Fluvoxamine	B, NB
	Imipramine	B, NB
	Maprotiline	B, NB
	Melitracen	B, NB
	Melitracen metabolite(s)	B
	Mianserin	B, NB
	Milnacipran	B, NB
	Mirtazapine	B, NB
	Mirtazapine metabolite(s)	B
	Moclobemide	B, NB
	Nefazodone	B
	Nortriptyline	B, NB
	Paroxetine	B, NB
	Paroxetine metabolite(s)	B
	Selegiline	B, NB
	Sertraline metabolite(s)	B
	Tianeptine	B
	Tianeptine metabolite(s)	B

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Antidepressants	Trazodone	B, NB
	Trazodone metabolite(s)	B
	Trimipramine	B, NB
	Trimipramine metabolite(s)	B
	Venlafaxine	B, NB
	Venlafaxine metabolite(s)	B
	Vortioxetine	B, NB
Antidiarrheals	Atropine / Hyoscyamine	B, NB
	Loperamide	B, NB
Antidotes, Detoxifying Agents & Drugs Used in Substance Dependence	Atropine / Hyoscyamine	B, NB
	beta-Naltrexol	B
	Deferiprone	NB
	Disulfiram	B, NB
	Flumazenil	B, NB
	Hyoscyamine / Atropine	B, NB
	Lobeline	B, NB
	Methadone	B, NB
	Methadone metabolite(s)	B
	Nalmefene	B, NB
	Nalorphine	B, NB
	Naloxone	B, NB
	Naltrexone	B, NB
	Physostigmine (Eserine)	B, NB
Antiemetics	Aprepitant	B, NB
	Chlorpromazine	B, NB
	Chlorpromazine metabolite(s)	B
	Dolasetron	B, NB
	Domperidone	B, NB
	Domperidone metabolite(s)	B
	Granisetron	B, NB
	Granisetron metabolite(s)	B
	Metoclopramide	B, NB
	Ondansetron	B, NB
	Sparteine	B

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Antiemetics	Triflupromazine	B, NB
	Tropisetron	B, NB
	Varenicline	B
Antifungals	Bifonazole	B, NB
	Clotrimazole	B, NB
	Fenticonazole	B
	Fluconazole	B, NB
	Flucytosine	NB
	Isoconazole / Miconazole	B
	Isoconazole	NB
	Itraconazole	B, NB
	Ketoconazole	B, NB
	Miconazole / Isoconazole	B
	Miconazole	NB
	Naftifine	B
	Nystatin	B
	Sertaconazole	NB
	Terbinafine	B, NB
	Terbinafine metabolite(s)	B
	Tioconazole	B, NB
	Tolnaftate	B
	Voriconazole	B, NB
Antiglaucoma Preparations	Acetazolamide	B, NB
	Apraclonidine	B, NB
	Betaxolol	B, NB
	Bimatoprost	B
	Brimonidine	B, NB
	Brinzolamide	NB
	Carbachol	B
	Carteolol	B, NB
	Dorzolamide	B, NB
	Levobunolol	B, NB
	Pilocarpine	B, NB
	Timolol	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Antiglaucoma Preparations	Travoprost	NB
Antihelmintics	Albendazole	B
Antihyperprolactinaemic Agents	Bromocriptine	B, NB
	Cabergoline	B, NB
Antileprotics	Dapsone	B, NB
	Ethionamide	B, NB
	Thalidomide	B, NB
	Thalidomide metabolite(s)	B
Antimalarials	Chloroquine	B, NB
	Halofantrine	B, NB
	Hydroxychloroquine	B, NB
	Mefloquine	B, NB
	Primaquine	B, NB
	Pyrimethamine	B, NB
	Quinidine	B, NB
	Quinine / Quinidine	B, NB
	Quinine metabolite(s) / Quinidine metabolite(s)	B
	Sulfadoxine	B, NB
Antimigraine Preparations	Ergotamine	NB
	Flunarizine	B, NB
	Metoprolol	B, NB
	Metoprolol metabolites(s)	B
	Pizotifen	B, NB
	Propranolol	B, NB
	Propranolol metabolite(s)	B
	Sumatriptan	B, NB
	Sumatriptan metabolite(s)	B
	Zolmitriptan	NB
Anti-obesity Agents	Amfepramone (Diethylpropion)	B, NB
	Aminorex	B
	2,4-Dinitrophenol	B, NB
	Dimethylamylamine (DMAA)	B
	Fenfluramine	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Anti-obesity Agents	Fenfluramine metabolite(s)	B
	Lorcaserin	B, NB
	Mazindol	B, NB
	Orlistat	B
	Phentermine	B, NB
	Rimonabant	B, NB
	Sibutramine	B, NB
	Sibutramine metabolites(s)	B
	Homosibutramine	NB
	Benzyl-sibutramine	NB
	N-bisdemethyl-sibutramine	B, NB
	Chloro-sibutramine	NB
	N-desmethyl-sibutramine	B, NB
	Didesmethyl-sibutramine	NB
	N-formyl N,N-didesmethyl-sibutramine	NB
	N-Nitrosofenfluramine	B
Antiparkinsonian Drugs	Amantadine	B
	Benzhexol	B, NB
	Benzhexol metabolite(s)	B
	Benztropine	B, NB
	Bromocriptine	B, NB
	Cabergoline	B, NB
	Entacapone	NB
	Levodopa	B
	Orphenadrine	B, NB
	Orphenadrine metabolite(s)	B
	Pramipexole	B
	Ropinirole	B, NB
	Selegiline	B, NB
Antipsychotics	Amisulpride	B, NB
	Aripiprazole	B, NB
	Brexpiprazole	B
	Chlorpromazine	B, NB
	Chlorpromazine metabolites(s)	B

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Antipsychotics	Clozapine	B, NB
	Clozapine metabolite(s)	B
	Droperidol	B, NB
	Flupenthixol	NB
	Fluphenazine	B, NB
	Haloperidol	B, NB
	Haloperidol metabolites(s)	B
	Loxapine	B, NB
	Lurasidone	B, NB
	Lurasidone metabolites(s)	B
	Mesoridazine	B, NB
	Molindone	B
	Olanzapine	B, NB
	Olanzapine metabolite(s)	B
	Paliperidone	B, NB
	Penfluridol	B, NB
	Pericyazine	B, NB
	Perphenazine	B, NB
	Phenothiazine	B, NB
	Pimozide	B, NB
	Prochlorperazine	B, NB
	Quetiapine	B, NB
	Quetiapine metabolite(s)	B
	Reserpine	B, NB
	Risperidone	B, NB
	Risperidone metabolite(s)	B
	Sertindole	B, NB
	Sulpiride	B, NB
	Thioridazine	B, NB
	Thiothixene	B, NB
	Trifluoperazine	B, NB
	Trifluoperazine metabolite(s)	B
	Triflupromazine	B, NB
	Ziprasidone	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Antipsychotics	Ziprasidone metabolite(s)	B
	Zuclopenthixol	B, NB
	Zuclopenthixol metabolite(s)	B
Antiseptics	Chlorhexidine	B, NB
	Chloroxylenol	B, NB
	Dequalinium	NB
	Dichlorobenzyl alcohol	NB
Antispasmodics	Alverine	B, NB
	Atropine / Hyoscyamine	B, NB
	N-Butyl-scopolamine (Buscopan)	B
	Clidinium	NB
	Dicyclomine	B
	Dicycloverine	B
	Hyoscine butylbromide	NB
	Hyoscine methobromide	NB
	Hyoscyamine / Atropine	B, NB
	Mebeverine	B, NB
	Methylscopolamine	B
	Propantheline	B, NB
	Scopolamine	B, NB
Anti-TB Agents	4-Aminosalicylic acid	B
	Ethambutol	B
	Ethambutol metabolite(s)	B
	Ethionamide	B, NB
	Isoniazid	B, NB
	Isoniazid metabolite(s)	B
	Prothionamide	NB
	Pyrazinamide	B, NB
	Rifampicin	B, NB
Antithyroid Agents	Carbimazole	B, NB
	Methimazole	B, NB
	Propylthiouracil	B, NB
Antivertigo Drugs	Betahistine	NB
	Cinnarizine	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Antivertigo Drugs	Haloperidol	B, NB
	Haloperidol metabolite(s)	B
	Meclozine	B, NB
	Prochlorperazine	B, NB
	Promethazine	B, NB
	Promethazine metabolite(s)	B
Antivirals	Abacavir	B, NB
	Aciclovir / Valacyclovir metabolite(s)	B
	Amantadine	B
	Amprenavir	NB
	Atazanavir	NB
	Bictegravir	B
	Bictegravir metabolite(s)	B
	Darunavir	B, NB
	Didanosine	B, NB
	Dolutegravir	B, NB
	Efavirenz	B, NB
	Elvitegravir	B
	Emtricitabine	NB
	Entecavir	B
	Famciclovir	B, NB
	Indinavir	B, NB
	Lamivudine	B, NB
	Nevirapine	B, NB
	Oseltamivir (Tamiflu)	B, NB
	Penciclovir	B
	Raltegravir	B, NB
	Ritonavir	B, NB
	Saquinavir	NB
	Stavudine	NB
	Tenofovir	B, NB
	Tenofovir metabolite(s)	B
	Valacyclovir	B, NB
	Zidovudine	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Anxiolytics	Alprazolam	B, NB
	Alprazolam metabolite(s)	B
	Bromazepam	B, NB
	Buspirone	B, NB
	Chlordiazepoxide	B, NB
	Clobazam	B, NB
	Clobazam metabolite(s)	B
	Clonazepam	B, NB
	Clonazepam metabolite(s)	B
	Diazepam	B, NB
	Diazepam metabolite(s)	B
	Dipotassium Clorazepate	NB
	Hydroxyzine	B, NB
	Hydroxyzine metabolite(s)	B
	Lorazepam	B, NB
	Lorazepam metabolite(s)	B
	Medazepam	B, NB
	Meprobamate	B
	Midazolam	B, NB
	Midazolam metabolite(s)	B
	Nimetazepam	B, NB
	Nimetazepam metabolite(s)	B
	Oxazepam	B, NB
	Oxazepam metabolite(s)	B
	Pinazepam	B, NB
	Prazepam	B, NB
	Pregabalin	B
	Tetrazepam	B, NB
	Zolazepam	B
Barbiturates	Allobarbital	B
	Amobarbital / Pentobarbital	B, NB
	Barbital	NB
	Butabarbital	B, NB
	Butalbital	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Barbiturates	Hexobarbital	B, NB
	Pentobarbital /Amobarbital	B, NB
	Pentobarbital metabolite(s) / Amobarbital metabolite(s)	B
	Secobarbital	B, NB
	Thiopental	B, NB
Benzodiazepines	Alprazolam	B, NB
	Alprazolam metabolite(s)	B
	Bromazepam	B, NB
	Chlordiazepoxide	B, NB
	Clobazam	B, NB
	Clobazam metabolite(s)	B
	Clonazepam	B, NB
	Clonazepam metabolite(s)	B
	Diazepam	B, NB
	Diazepam metabolite(s)	B
	Dipotassium Clorazepate	NB
	Estazolam	B, NB
	Estazolam metabolite(s)	B
	Flunitrazepam	B, NB
	Flunitrazepam metabolite(s)	B
	Flurazepam	B, NB
	Flurazepam metabolite(s)	B
	Lorazepam	B, NB
	Lorazepam metabolite(s)	B
	Lormetazepam	B, NB
	Medazepam	B, NB
	Midazolam	B, NB
	Midazolam metabolite(s)	B
	Nimetazepam	B, NB
	Nimetazepam metabolite(s)	B
	Nitrazepam	B, NB
	Nitrazepam metabolite(s)	B
	Oxazepam	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Benzodiazepines	Oxazepam metabolite(s)	B
	Phenazepam	B, NB
	Pinazepam	B, NB
	Prazepam	B, NB
	Temazepam	B, NB
	Temazepam metabolite(s)	B
	Tetrazepam	B, NB
	Triazolam	B, NB
	Triazolam metabolite(s)	B
	Zolpidem	B, NB
	Zolpidem metabolite(s)	B
Beta Blockers	Acebutolol	B, NB
	Alprenolol	B, NB
	Atenolol	B, NB
	Betaxolol	B, NB
	Bisoprolol	B, NB
	Carteolol	B, NB
	Carvedilol	B, NB
	Carvedilol metabolite(s)	B
	Celiprolol	B, NB
	Esmolol	B, NB
	Labetalol	B, NB
	Labetalol metabolite(s)	B
	Levobunolol	B, NB
	Metoprolol	B, NB
	Metoprolol metabolite(s)	B
	Nadolol	B, NB
	Oxprenolol	B
	Pindolol	B, NB
	Propranolol	B, NB
	Propranolol metabolite(s)	B
	Sotalol	B, NB
	Timolol	B, NB
Beta Agonists	Cimaterol	NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Beta Agonists	Denopamine	NB
	Dobutamine	B, NB
	Dopexamine	NB
	Etilefrine	NB
	Isoprenaline (Isoproterenol)	B, NB
	Metaproterenol (Orciprenaline)	B, NB
	Methoxyphenamine	B, NB
	Ractopamine	NB
	Xamoterol	NB
Beta-2 Agonists	Bambuterol	B
	Clenbuterol	B, NB
	Fenoterol	NB
	Formoterol	NB
	Isoxsuprine	NB
	Olodaterol	B
	Pirbuterol	NB
	Procaterol	B, NB
	Reproterol	B. NB
	Ritodrine	B, NB
	Salbutamol / Levosalbutamol (Levalbuterol)	B, NB
	Salmeterol	NB
	Terbutaline	B, NB
	Terbutaline metabolite(s)	B
	Tulobuterol	B, NB
	Zilpaterol	NB
	Zinterol	NB
Bile acid	Chenodeoxycholic Acid	B
	Cholic acid	B
	Deoxycholic acid	B
Calcium Channel Blockers	Amlodipine	B, NB
	Amlodipine metabolite(s)	B
	Bepridil	B, NB
	Diltiazem	B, NB
	Diltiazem metabolite(s)	B

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Calcium Channel Blockers	Felodipine	B, NB
	Isradipine	B, NB
	Lacidipine	B, NB
	Lercanidipine	B, NB
	Nifedipine	B, NB
	Nifedipine metabolite(s)	B
	Nimodipine	B, NB
	Nitrendipine	B
	Nitrendipine metabolite(s)	B
	Verapamil	B, NB
	Verapamil metabolite(s)	B
Cannabinoids	Cannabinol	B, NB
	Cannabinol metabolite(s)	B
	Tetrahydrocannabinol (delta-9-tetrahydrocannabinol)	B, NB
Carbamates	Carbofuran	NB
	Methomyl	NB
	Propoxur (Baygon)	B, NB
Cardiac Drugs	Adenosine	B
	Ajmaline	B, NB
	Amiodarone	B, NB
	Atropine / Hyoscyamine	B, NB
	Bretylium tosylate	B,NB
	Cibenzoline	B, NB
	Digitoxin	NB
	Digoxin	NB
	Disopyramide	B, NB
	Dobutamine	B, NB
	Dofetilide	B, NB
	Dopamine	B, NB
	Dronedarone	B, NB
	Epinephrine	B, NB
	Flecainide	B, NB
	Hyoscyamine / Atropine	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Cardiac Drugs	Ibutilide	B, NB
	Isoprenaline (Isoproterenol)	B, NB
	Metaproterenol (Orciprenaline)	B, NB
	Metildigoxin	NB
	Mexiletine	B
	Milrinone	B, NB
	Oxprenolol	B
	Procainamide	B, NB
	Procainamide metabolite(s)	B
	Propafenone	B, NB
	Quinidine	B, NB
	Sacubitril	B, NB
	Sematilide	NB
	Synephrine	B, NB
Cephalosporins	Cefaclor	NB
	Cefadroxil	B
	Cefdinir	NB
	Cefazolin	B
	Cefepime	B
	Cefixime	B, NB
	Cefoperazone	B
	Cefotaxime	B, NB
	Cefpodoxime	NB
	Ceftazidime	B
	Cefradine	B
	Ceftriaxone (Ceftriazone)	B,
	Cefuroxime	B, NB
	Cephalexin	B
	Cephalothin	NB
	Cephathiamidinum	NB
Chloramphenicols	Chloramphenicol	B, NB
Cholinesterase inhibitors	Acephate	B
	Carbofuran	NB
	Chlorpyrifos	B

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Cholinesterase inhibitors	Chlorpyrifos metabolite(s)	B
	Diazinon (Dimpylate)	B, NB
	Dichlorvos	NB
	Distigmine	B
	Donepezil	B, NB
	Ethion	B
	Fenitrothion	B, NB
	Fenthion metabolite(s)	B
	Galantamine	B, NB
	Malathion	B, NB
	Methidathion	B
	Methomyl	NB
	Neostigmine	NB
	Physostigmine (Eserine)	B, NB
	Propoxur (Baygon)	B, NB
	Pyridostigmine	B, NB
	Rivastigmine	B, NB
	Tetrachlorvinphos	NB
CNS stimulants	Aminorex	B
	Pholedrine	B
Cocaine	Cocaine	B, NB
	Cocaine metabolite(s)	B
Corticosteroids	Alclomethasone dipropionate	B, NB
	Beclomethasone	B, NB
	Beclomethasone dipropionate	B
	Betamethasone	B, NB
	Betamethasone diproprionate	B, NB
	Betamethasone valerate	B, NB
	Budesonide	B, NB
	Clobetasol	NB
	Clobetasol Metabolite(s)	B
	Clobetasol propionate	B, NB
	Clobetasone butyrate	B, NB
	Cortisone acetate	NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Corticosteroids	Desoximetasone	B, NB
	Dexamethasone	B, NB
	Dexamethasone acetate	B, NB
	Dexamethasone phosphate	B, NB
	Difluorocortolone valerate	B, NB
	Fludrocortisone acetate	B, NB
	Flumethasone	B, NB
	Fluocinolone acetonide	B, NB
	Fluocinonide	B, NB
	Fluocortolone pivalate	NB
	Fluoromethalone	NB, B
	Fluticasone propionate	B, NB
	Halcinonide	B, NB
	Hydrocortisone	NB
	Hydrocortisone acetate	B, NB
	Methylprednisolone	B, NB
	Mometasone furoate	NB
	Prednisolone	B, NB
	Prednisolone acetate	NB
	Prednisone	B, NB
	Prednisone acetate	NB
	Triamcinolone	B, NB
	Triamcinolone acetonide	B, NB
Cough & Cold Preparations	Ambroxol	B, NB
	Benproperine	B
	Bromhexine	B, NB
	Bromhexine metabolite(s)	B
	Carbetapentane (Pentoxyverine)	B, NB
	Carbetapentane (Pentoxyverine) metabolite(s)	B
	Cloperastine	B
	Cloperastine metabolite(s)	B
	Codeine	B, NB
	Codeine metabolite(s)	B
	Cyclopentolate	NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Cough & Cold Preparations	Dextromethorphan	B, NB
	Dihydrocodeine	B, NB
	Diphenoxylate	B, NB
	Diphenoxylate metabolite(s)	B
	Guaifenesin	B, NB
	Hydrocodone	B, NB
	Hydrocodone metabolite(s)	B
	Levodropropizine	B
	Morphine	B, NB
	Morphine metabolite(s)	B
	Noscapine	B, NB
	Papaverine	B, NB
	Papaverine metabolite(s)	B
	Pentoxyverine (Carbetapentane) metabolite(s)	**B**
	Phenylephrine	B, NB
	Phenylpropanolamine	B, NB
	Phenyltoloxamine	B, NB
	Pholcodine	B, NB
	Pholcodine metabolite(s)	B
	Pseudoephedrine	B, NB
	Pseudoephedrine metabolite(s)	B
Cytotoxic Chemotherapy	Amsacrine	NB
	Aminopterin	NB
	Bendamustine	B
	Capecitabine	B, NB
	Carmustine	NB
	2-Chloroquinoxaline	NB
	Cyclophosphamide	B
	Cytarabine	B, NB
	Dacarbazine	B, NB
	Daunorubicin	B, NB
	Doxorubicin	B, NB
	Etoposide	B, NB
	Epirubicin	NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Cytotoxic Chemotherapy	Fludarabine	NB
	Fluorouracil	B, NB
	Gemcitabine	B, NB
	Hydroxyurea	B
	Idarubicin	B
	Ifosfamide	B
	Irinotecan	NB
	Lomustine	NB
	Melphalan	B, NB
	Methotrexate	B, NB
	Mitoxantrone	NB
	Paclitaxel	B, NB
	Procarbazine	NB
	Tegafur	NB
	Teniposide	B, NB
	Thioguanine	B
	Topotecan	B, NB
	Vinblastine	B, NB
	Vincristine	B, NB
	Vinorelbine	NB
Depot Contraceptives	Levonorgestrel	B, NB
	Medroxyprogesterone	B, NB
Disease-Modifying Anti-Rheumatic Drugs (DMARDs)	Chloroquine	B, NB
	Leflunomide	B, NB
	Sulfasalazine	B, NB
Diuretics	Acetazolamide	B, NB
	Amiloride	B, NB
	Bumetanide	B, NB
	Canrenone	B, NB
	Canrenone metabolite(s)	B
	Chlorthalidone	B, NB
	Cyclopenthiazide	B, NB
	Eplerenone	B, NB
	Ethacrynic acid	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Diuretics	Frusemide	B, NB
	Hydrochlorothiazide	B, NB
	Indapamide	B, NB
	Methyclothiazide	B, NB
	Metolazone	B, NB
	Spironolactone	B, NB
	Spironolactone metabolite(s)	B
	Torasemide	B, NB
	Torasemide metabolite(s)	B
	Triamterene	B, NB
Drugs Acting on Uterus	Atosiban	B
	Mifepristone	B
	Methylergometrine	NB
	Ritodrine	B, NB
Drugs for Bladder & Prostate Disorders	Alfuzosin	B, NB
	Doxazosin	B, NB
	Finasteride	B, NB
	Flavoxate	B, NB
	Oxybutynin	B
	Prazosin	B, NB
	Propiverine	B
	Tamsulosin	B, NB
	Terazosin	B, NB
	Terazosin metabolite(s)	B
	Tolterodine	NB
Dyslipidaemic Agents	Atorvastatin	B, NB
	Benfluorex	B, NB
	Bezafibrate	B, NB
	Ezetimibe	B, NB
	Ezetimibe metabolite(s)	B
	Fenofibrate	B
	Fluvastatin	B, NB
	Gemfibrozil	B, NB
	Gemfibrozil metabolite(s)	B

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Dyslipidaemic Agents	Lovastatin	B, NB
	Pravastatin	B, NB
	Probucol	B
	Rosuvastatin	B, NB
	Simvastatin	NB
Ectoparasiticides	Benzyl benzoate	B, NB
	Crotamiton	NB
	Malathion	B, NB
	Avanafil	NB
Emerging Drugs of abuse	AB-FUBINACA	B, NB
	ADB-FUBINACA	B, NB
	2-AI	B, NB
	AM251	B
	AM630	B, NB
	AM679	B, NB
	AM1241	B, NB
	AM1248	B, NB
	AM2201	B, NB
	AM2201 metabolite(s)	B
	AM2232	B, NB
	AM2233	NB
	5-APB	B, NB
	6-APB	B, NB
	5-APDI	NB
	Asaricin (Myristicin)	B, NB
	BB-22	B, NB
	25B-NBOMe	B, NB
	Benzedrone	NB
	Benzylamine	B, NB
	Bromo-dragonfly	B, NB
	4-Bromomethcathinone	NB
	BZP (1-Benzylpiperazine)	B, NB
	Bufotenine	B, NB
	Buphedrone	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Emerging Drugs of abuse	Butylone (bk-MBDB)	B, NB
	Cannabidiol	B
	Carfentanil	B
	Carfentanil metabolite(s)	B
	Cathinone	B, NB
	2C-B (4-Bromo-2,5-dimethoxy-phenethylamine)	B, NB
	2C-E	B, NB
	2C-H (2,5-dimethoxyphenethylamine)	B, NB
	2C-I (2,5-dimethoxy-4-iodo-phenethylamine)	B, NB
	2C-T	NB
	2C-T-2 (2,5-Dimethoxy-4-ethylthiophenethylamine)	B, NB
	2C-T-2-NBOMe (25T2-NB2OMe)	NB
	2C-T-4 (2,5-Dimethoxy-4-isopropylthiophenethylamine)	B, NB
	2C-T-4-NBOMe (25T4-NB2OMe)	NB
	2C-T-7 (2,5-Dimethoxy-4-propylthiophenethylamine)	B, NB
	2C-T-7-NBOMe (25T7-NB2OMe)	NB
	2C-T-NBOMe	NB
	25C-NBOMe 2-(4-chloro-2,5-dimethoxyphenyl)-N-[(2-methoxyphenyl)methyl]ethanamine	B, NB
	Chloroamphetamine	B, NB
	1-(3-chlorobenzyl) piperazine	B, NB
	mCPP (meta-chlorophenylpiperazine)	B, NB
	CP 47,497	B, NB
	CP 47,497-C8-homolog	B
	CP 55,940	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Emerging Drugs of abuse	DBP (1,4-Dibenzylpiperazine)	B, NB
	Demoxepam	B, NB
	Deschloroketamine (DCK)	B
	(S)-Desoxy-D2PM ((S)-2-Diphenylmethylpyrrolidine)	B, NB
	Desoxypipradrol	B, NB
	2,3-Dichlorophenylpiperazine	NB
	2, 5-Dimethoxyamphetamine	B, NB
	3, 4-Dimethoxyamphetamine	B, NB
	N,N-Diethyl-cathinone	NB
	N,N-Dimethyl-cathinone	NB
	3,4-Dimethylethcathinone	B, NB
	N,N-Dimethyltryptamine	B, NB
	Diphenylprolinol (D2PM)	B, NB
	DOB (4-Bromo-2,5-dimethoxy-amphtamine)	B, NB
	DOET (2,5-Dimethoxy-4-ethylamphetamine)	B, NB
	DOI (2,5-Dimethoxy-4-iodoamphetamine)	NB
	DOM (4-Methyl-2,5-dimethoxy-amphetamine)	B, NB
	25E-NBOMe	NB
	Ethcathinone	B, NB
	alpha-Ethylaminohexanophenone (N-Ethylhexedrone)	B
	N-Ethylamphetamine	B, NB
	4-Ethylethcathinone	B, NB
	4-Ethylmethcathinone	B, NB
	Ethylone	B, NB
	N-Ethylpentylone	B, NB
	Eutylone	B, NB
	4-Fluoroamphetamine	B, NB
	1-(4-Fluorobenzyl) piperazine	B, NB
	2-Fluorodeschloroketamine	B, NB
	2-Fluorodeschloroketamine metabolite(s)	B
	4-Fluoroethcathinone	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Emerging Drugs of abuse	2-Fluoromethamphetamine	B, NB
	4-Fluoromethamphetamine	NB
	2-Fluoromethcathinone	NB
	3-Fluoromethcathinone	NB
	4-Fluoromethcathinone	NB
	5-Fluoro-NNEI	NB
	5-Fluoro-NNEI 2'-naphthyl isomer	NB
	5-Fluoro PB-22	B, NB
	4-Fluorotropacocaine	B, NB
	pFPP (para-fluorophenylpiperazine)	B, NB
	FUB-NPB-22	B, NB
	FUB-PB-22	B, NB
	25G-NBOMe	NB
	Heliomethylamine	NB
	HMMA (4-Hydroxy-3-methoxymethamphetamine)	B
	25H-NBOMe	B, NB
	HU-210	B
	HU-211 (Dexanabino)	B
	25I-NBMD	B, NB
	25I-NBOMe	B, NB
	JWH-007	B
	JWH-015	B, NB
	JWH-016	B, NB
	JWH-018	B
	JWH-018 metabolite(s)	B
	JWH-018 adamantyl carboxamide	B
	JWH-019	B
	JWH-020	B
	JWH-031	B, NB
	JWH-071	B, NB
	JWH-072	B, NB
	JWH-073	B, NB
	JWH-080	NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Emerging Drugs of abuse	JWH-081	B
	JWH 116	B, NB
	JWH-122	B
	JWH-122 metabolite(s)	B
	JWH-167	nb
	JWH-175	B
	JWH-122 N-5-hydroxypentyl metabolite(s)	B
	JWH-176	B
	JWH-180	B
	JWH-193	NB
	JWH-198	NB
	JWH-200	B, NB
	JWH-249	B
	JWH-302	B, NB
	JWH-387	B, NB
	JWH-412	B
	JWH-424	B
	XLR11	B, NB
	LAMPA (Lysergic acid N,N-methylpropylamide)	B, NB
	MAM2201	B, NB
	MAM2201 N-4-hydroxypentyl metabolite(s)	B
	Mescaline	B, NB
	MBDB [*N*-methyl-1-(3,4-methylenedioxyphenyl)-2-butanamine]	B, NB
	3,4-Methylenedioxy-N-benzylcathinone	B, NB
	MDBP [1-(3,4-Methylenedioxybenzyl) piperazine]	B
	MDDMA (3,4-methylenedioxydimethylamphetamine)	B, NB
	MDEA (3,4-Methylene-dioxy-*N*-ethyl-amphetamine)	B, NB
	MDPV (Methylenedioxypyrovalerone)	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Emerging Drugs of abuse	MDPPP (3,4-Methylenedioxy-α-pyrrolidinopropiophenone hydrochloride	B
	Mephedrone	B, NB
	pMeOPP [1-(4-methoxyphenyl)piperazine]	B, NB
	Mesylate ((+) - WIN 55, 212-2()	B, NB
	Mesylate ((±) - WIN 55, 212)	B, NB
	Methcathinone	B, NB
	Methedrone	B, NB
	Methiopropamine	NB
	Methoxetamine	B, NB
	1-(4-Methoxybenzyl) piperazine	B, NB
	5-Methoxy-N,N-diallytryptamine	B, NB
	5-Methoxy-N,N-dimethyltryptamine	B, NB
	5-Methoxy-DIPT (5-methoxy-diisopropyltryptamine)	B, NB
	2-Methoxymethcathinone	B, NB
	5-Methoxy-α-methyltryptamine	B
	d,I-4-Methylamphetamine	NB
	3-Methylbuphedrone	NB
	5-Methyl-N,N-dimethyltryptamine	B, NB
	5, 6-Methylenedioxy-2-aminoindan	B, NB
	3, 4 Methylenedioxyphenethylamine	B, NB
	3',4'-Methylenedioxy-α-Pyrrolidinobutiophenone (3, 4-MDPBP)	B, NB
	(±)-4-Methylephedrine	B, NB
	3-Methylethcathinone	B, NB
	4-Methylethylcathinone	NB
	cis-3-Methyl-fentanyl	B, NB
	Methylhexanamine	B
	2-Methylmethcathinone	NB
	Methylone	B, NB
	4-Methyl-α-PBP (4-Methyl-α-pyrrolidinobutiophenone)	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Emerging Drugs of abuse	4-Methyl-α-PHP (4-Methyl-α-pyrrolidinohexanophenone)	B, NB
	4-Methyl-pyrrolidinopropiophenone	B, NB
	α-Methyl tryptamine	B, NB
	Mitragynine	B, NB
	MMAI (2,3-Dihydro-5-methoxy-6-methyl-1H-inden-2-amine)	
	4-MTA (4-Methylthioamphetamine)	B, NB
	Myristicin (Asaricin)	B, NB
	nor-Mephedrone	NB
	Naphyrone	B, NB
	NM-2AI	NB
	NNEI	NB
	NRG-3	B, NB
	2-oxo-PCE	B, NB
	2-oxo-PCE metabolite(s)	B
	PB-22	B, NB
	Pentedrone	B, NB
	Pentylone	B, NB
	4-(1-Piperazinyl)phenol	B, NB
	PMA (para-methoxyamphetamine)	B
	PMMA (para-Methoxymethamphetamine)	B, NB
	PPP (α-Pyrrolidinopropiophenone hydrochloride)	B
	N-Propylamphetamine	B, NB
	alpha-Pyrrolidinovalerophenone	B, NB
	Pyrovalerone	NB
	RCS-4	B, NB
	Remifentanil metabolite(s)	B
	Salvinorin A	B, NB
	Salvinorin B	NB
	25T2-NB2OMe (2C-T-2-NBOMe)	NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Emerging Drugs of abuse	25T4-NB2OMe (2C-T-4-NBOMe)	NB
	25T7-NB2OMe (2C-T-7-NBOMe)	NB
	TFMPP [1-(3-Trifluoromethylphenyl) piperazine]	B, NB
	Tiletamine	B, NB
	trans-Tilidine	B, NB
	TMA-2	B, NB
	3,4,5-Trimethoxyamphetamine	B, NB
	UR144	B
	URB597	NB
	URB602	NB
	URB754	NB
	URB937	NB
	(+) - WIN 55, 212-2 (mesylate)	B, NB
	(±) - WIN 55, 212 (mesylate)	B, NB
Erectile Dysfunction Drugs	Papaverine	B, NB
	Papaverine metabolite(s)	B
	Sildenafil	B, NB
	Sildenafil metabolite(s)	B
	Tadalafil	B, NB
	Tadalafil metabolite(s)	B
	Vardenafil	B, NB
	Vardenafil metabolite(s)	B
Erectile Dysfunction Drugs Analogues	Acetaminotadalafil	NB
	Acetil acid	B, NB
	Acetildenafil	NB
	Acetylvardenafil	B, NB
	Aildenafil	B, NB
	Aminotadalafil	B, NB
	Benzylsildenafil	NB
	N-butyl nortadalafil	NB
	Carbodenafil	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Erectile Dysfunction Drugs Analogues	Chlorodenafil	B, NB
	Chloropretadalafil	NB
	Cinnamyldenafil	NB
	Descarbonsildenafil	NB
	1-Decarboxyl-1-(bromoacetyl) norneovardenafil	NB
	Depiperazino thiosildenafil	NB
	Desethylacetildenafil	NB
	N-Desethyl vardenafil	B, NB
	Desmethyl carbodenafil (Desmethyl fondenafil)	B, NB
	Des-(4-methylpiperazin-1-ylsulfonyl) desmethylsildenafil	B, NB
	N-Desmethyl-N-cyclopentyl tadalafil	NB
	N-Desmethyl tadalafil (Nortadalafil)	B, NB
	Desmethylthiosildenafil	NB
	7-Despropyl 7-methyl vardenafil	B, NB
	Desulfovardenafil	B, NB
	Dexmethylene tadalafil / 2'-oxo tadalafil	NB
	E-dichlorodenafil	NB
	Dichlorodenafil	NB
	Dimethylacetildenafil	NB
	Dinitrodenafil	NB
	Dipropylaminopretadalafil	NB
	Dithio-desmethyl-carbodenafil	NB
	Gendenafil	B, NB
	Homosildenafil	NB
	Hydroxyacetildenafil	NB
	Hydroxychlorodenafil	B, NB
	2-Hydroxyethyl nortadalafil	B, NB
	Hydroxyhomosildenafil	NB
	2-Hydroxypropyl nortadalafil	B, NB
	Hydroxythiohomosildenafil	NB
	Hydroxythiovardenafil	NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Erectile Dysfunction Drugs Analogues	Hydroxyvardenafil	B, NB
	Iso sildenafil	B
	Mutaprodenafil	NB
	Nitrodenafil	B, NB
	Norneosildenafil	NB
	Norneovardenafil	B, NB
	2'-oxo tadalafil / Dexmethylene tadalafil	NB
	Piperiacetildenafil	NB
	Piperazinonafil	NB
	Piperidenafil	B, NB
	Propoxyphenyl aildenafil	NB
	Propoxyphenyl hydroxyhomosildenafil	NB
	Propoxyphenyl sildenafil	NB
	Propoxyphenyl thioaildenafil	NB
	Propoxyphenyl thiohydroxyhomosildenafil	NB
	Propoxyphenyl thiosildenafil	NB
	Sildenafil N-oxide	NB
	Tadalafil hydroxypiperidone	NB
	Tadalafil ketolactam	NB
	Thioaildenafil	NB
	Thiohomosildenafil	NB
	Thiosildenafil	NB
	Thiovardenafil	NB
	Udenafil	NB
	Vardenafil hydrolysis product	NB
	Vardenafil N-oxide	NB
	Vardenafil oxopiperazine (impurity)	NB
	Xanthoanthrafil	NB
GIT Regulators, Antiflatulents & Anti-inflammatories	4-Aminosalicylic acid	B
	5-Aminosalicylic acid	B
	Cisapride	B, NB
	Domperidone	B, NB
	Domperidone metabolite(s)	B
	Metoclopramide	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
GIT Regulators, Antiflatulents & Anti-inflammatories	Mosapride	B
	Sulfasalazine	B, NB
	Trimebutine	NB
H1 Antagonists	Acrivastine	B, NB
	Antazoline	B, NB
	Astemizole	B, NB
	Azatadine	B, NB
	Azelastine	B, NB
	Brompheniramine	B, NB
	Brompheniramine metabolite(s)	B
	Carbinoxamine	B, NB
	Cetirizine	B, NB
	Cetirizine metabolite(s)	B
	Chlorpheniramine	B, NB
	Chlorpheniramine metabolite(s)	B
	Cinnarizine	B, NB
	Clemastine	B, NB
	Clemizole	B, NB
	Cyproheptadine	B, NB
	Cyproheptadine metabolite(s)	B
	Dimetindene	B
	Dioxopromethazine	B, NB
	Diphenhydramine metabolite(s)	B
	Diphenhydramine / Dimenhydrinate	B, NB
	Diphenylpyraline	B, NB
	Doxylamine	B, NB
	Doxylamine metabolite(s)	B
	Emedastie difumarate	NB
	Fexofenadine	B, NB
	Homochlorcyclizine	B, NB
	Hydroxyzine	B, NB
	Hydroxyzine metabolite(s)	B
	Ketotifen	B, NB
	Loratadine	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
H1 Antagonists	Meclozine	B, NB
	Mepyramine	NB
	Mizolastine	B, NB
	Olopatadine	B
	Pheniramine	B, NB
	Phenyltoloxamine	B, NB
	Piprinhydrinate	NB
	Promethazine	B, NB
	Promethazine metabolite(s)	B
	Pyrilamine	B
	Terfenadine	B, NB
	Trimeprazine	B, NB
	Tripelennamine	B, NB
	Triprolidine	B, NB
H2 Antagonists	Cimetidine	B, NB
	Famotidine	B, NB
	Ranitidine	B, NB
	Ranitidine metabolites	B
Haemorrheologicals	Oxpentifylline	NB
	Pentoxifylline	B
	Pentoxifylline metabolite(s)	B
Haemostatics	Phytomenadione (Vit K1)	NB
	Tranexamic acid	B
Herbal Markers / Herbal Extract	Abrine	B, NB
	13-Acetyl-9-dihydrobaccatin III	NB
	Aconitine	B, NB
	Ajmalicine	B, NB
	Aloe-emodin	B, NB
	Aloin	B, NB
	alpha-Amanitin	B, NB
	beta-Amanitin	B, NB
	gamma-Amanitin	B, NB
	Alisol C monoacetate	B, NB
	Alpinetin	NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Herbal Markers / Herbal Extract	Amygdalin	B, NB
	Andrographolide	B, NB
	p-Anisaldehyde	NB
	Anisodamine	B, NB
	Anisodine	B, NB
	Apigenin	B, NB
	Arabinose	B
	Arbutin	NB
	Arctigenin	B, NB
	Arecoline	B
	Aristolochic acid A	B, NB
	Aristolochic acid B	B, NB
	Aristolochic acid C	NB
	Asaricin (Myristicin)	B, NB
	Asarone, B-(SG)	B, NB
	beta-Asarone	NB
	Atractylenolide III	B
	Atractyloside	B, NB
	Auramine O	NB
	Baccatin III	NB
	Baicalein	B, NB
	Baicalin	NB
	Bakkenolide	B, NB
	Bakuchiol	B
	Belamcandin	NB
	Benzoylaconine	B
	Benzoylhypaconine	B
	Benzoylmesaconine	B, NB
	Berberine	B, NB
	Bergapten	B, NB
	Bergenin	NB
	Bifendate	B, NB
	Biochanin A	B, NB
	Boldtine	NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Herbal Markers / Herbal Extract	Borneol / Isoborneol	B
	Brucine	B, NB
	Buddleoside	NB
	Bufalin	B, NB
	Bullatine A	B, NB
	Bullatine B (Neoline)	B, NB
	Bulleyaconitine (Crassacauline A)	B, NB
	Caffeoyl ethyl ester	B, NB
	Calycosin	B, NB
	Calycosin-7-O-β-D-glucoside	NB
	Camptothecin	B, NB
	Capsaicin	B, NB
	Cardamonin	B, NB
	Caryophyllene oxide	B
	Cassyfiline	B, NB
	Casticin (Vitexicarpin)	B, NB
	Catechin	B, NB
	Catharanthine	B, NB
	Cavidine	NB
	Cepharanthin	B, NB
	Alpha-Chaconine	NB
	Chelerythrine	NB
	Chlorogenic acid	NB
	Chrysin	B, NB
	Chrysophanol	B, NB
	Chuangxiongzine	NB
	Cianidanol	B
	Cimifugin	B, NB
	Cinnamic acid	B, NB
	Cinobufagin	B, NB
	Citric acid	B
	Cochinchinenin C	NB
	Columbianadin	B, NB
	Coniine	B

Class	Test (parent compound or metabolite)	Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)
Herbal Markers / Herbal Extract	Convallatoxin	B, NB
	Cordycepin	B, NB
	Corynoline	NB
	Corynoxine (Rhynchophylline)	B, NB
	p-Coumaric acid	B, NB
	Crassicauline A	B
	Crotaline (Monocrotaline)	B
	Cryptotanshinone	B
	Curcumenol	NB
	Curcumin	NB
	Cycleanine	NB
	Cymarin	B, NB
	Cynanchagenin	NB
	Cytisine	B, NB
	Daidzein	B, NB
	Daidzin	B, NB
	Danshensu	B, NB
	Daphnetin	NB
	Deacetylbaccatine III	NB
	Deacetylcrassicauline-A	B
	Desacetyl Lappaconitine	B
	Deacetylyunaconitine	B
	Dehydroabietic acid	B
	Dehydroandrographoline	B, NB
	13-Dehydroxyindaconitine	B, NB
	Deoxyaconitine	B
	Deoxyschizandrin (Schizandrin A)	B, NB
	Dictamnine	B, NB
	Digitoxigenin	B, NB
	Digoxigenin	B
	Dihydrocapsaicin	B, NB
	Dihydrokavain	B, NB
	Dihydrolycorine	B, NB
	Dihydromethysticin	NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Herbal Markers / Herbal Extract	Dihydrotanshinone I	B, NB
	1,8-Dihydroxyanthraquinone (Danthron)	B, NB
	Diosbulbin B	B, NB
	Dracohodin	NB
	Emodin	B, NB
	Ephedrine	B, NB
	Epimedin C	NB
	Erysotrine	B, NB
	Esculin	B, NB
	Eugenol	B
	Europine	B
	Evodiamine	B
	Evodin	B, NB
	Fangchinoline (HanfangchinB)	B, NB
	Fargesin	B, NB
	Farrerol	B, NB
	Ferulic acid	B, NB
	Foresaconitine	B
	Formononetin	B, NB
	Forskolin	B
	Forsythin	NB
	Fraxetin	B, NB
	Fraxinellone	B, NB
	Galangin	B, NB
	Ganoderic acid A	B, NB
	Gastrodin	NB
	Gaultherin	NB
	Gelsemine	B, NB
	Gelsenicine	NB
	Gelsevirine	B, NB
	Genistein	B, NB
	Genistin	B
	Germacrone	B, NB
	Gingerol	B

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Herbal Markers / Herbal Extract	Ginkgolide A	B, NB
	Ginkgotoxin	B
	Ginsenoside	NB
	Gitoxigenin	B, NB
	Gitoxin	NB
	Glycitein	B, NB
	Glycitin	NB
	Glycyrrhetinic acid	B, NB
	Glycyrrhizin / Glycyrrhizic acid	B
	Glycyrrhizic acid	NB
	Gomisin A	B, NB
	Grayanotoxin III	B
	Griseofulvin	B, NB
	Griseofulvin metabolite(s)	B
	Hanfangchin B (Fangchinoline)	B, NB
	Harmaline	B, NB
	Harmine	B, NB
	Harpagoside	NB
	Hederagenin	B
	Heliotrine	B
	Hesperidin	B, NB
	Higenamine	NB
	Hispidulin	NB
	Honokiol	B
	Hordenine	B, NB
	Humantenmine	B, NB
	Hupehenine	B
	Huperzine A	NB
	Huperzine B	NB
	2-(4-Hydroxyphenyl)ethanol	B, NB
	Hydroxysafflor yellow	NB
	1-Hydroxy-3,4,5-trimethoxyxanthone	B, NB
	Hyoscyamine / Atropine	B, NB
	Hypaconitine	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Herbal Markers / Herbal Extract	Hyperoside	NB
	Ibogaine	B
	Ibotenic acid	NB
	Icariin	B, NB
	Imperatorin	B, NB
	Indaconitine	B
	Ingenol	NB
	Indicine (Lycopsamine / Intermedine)	B, NB
	Intermedine (Indicine / Lycopsamine)	B, NB
	Irisflorentin	B, NB
	Isocolumbin	B, NB
	Isofraxidin	B, NB
	Isoferulic acid	NB
	Isoliquiritigenin	B, NB
	Isopimpinellin	NB
	Isopsoralen / Psoralen	B
	Isopsoralen	NB
	Isorhynchophylline	B, NB
	Isovincoside lactone (Strictosamide)	B, NB
	Jacobine	B, NB
	Jervine	B
	Jujuboside A	NB
	Jujuboside B	NB
	Kaempferol	B, NB
	Kavain	B, NB
	Koumine	B, NB
	Lasiocarpine	NB
	Lasiocarpine N-oxide	NB
	Lamprolobine	B
	Lappaconitine	B
	Licochalcone A	NB
	Liensinine	NB
	Ligustrazine (Tetramethylpyrazine)	NB
	Linderane	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Herbal Markers / Herbal Extract	Liquidambaric acid	B
	Loureirin A	B, NB
	Loureirin B	B, NB
	Luteolin	NB
	Lycopsamine (Indicine / Intermedine)	B, NB
	Lycorine	B, NB
	Lysionotin	B, NB
	Magnolol	B
	Magnoshinin	B, NB
	Mangiferin	NB
	Matrine / Sophoridine	B, NB
	Mimosine	NB
	Menthol	B
	Mesaconine	B
	Mesaconitine	B, NB
	4-Methoxysalicylaldehyde	B, NB
	N-Methylcytisine	B, NB
	N-Methylephedrine	B, NB
	Methyl hesperidin	NB
	Methyleugenol	B, NB
	Methyllycaconitine	B, NB
	Methylpseudoephedrine	B
	Methysticin	NB
	Mogroside V	NB
	Muscimol	B
	Muscone	B
	Myristicin (Asaricin)	B, NB
	Narcissoside	NB
	Naringenin	B, NB
	Naringin	B, NB
	Nefrine perchlorate	NB
	Neoline (Bullatine B)	B, NB
	Neolitsine	NB
	Nitidine	NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Herbal Markers / Herbal Extract	Nobiletin	B, NB
	Norcantharidin	B, NB
	Norephedrine	B
	Notoginsenoside R1	B, NB
	Nuciferine	NB
	Obacunone	B
	Oleandrin	B, NB
	Oleanolic acid	B
	Oridonin	B, NB
	Osthole	B, NB
	Oxymatrine	B, NB
	Oxysophocarpine	NB
	Paeoniflorin	B, NB
	Paeonol	B, NB
	Palmatine	B, NB
	Praeruptorin A	B, NB
	Praeruptorin C	B, NB
	Perivine	NB
	Physcion	B, NB
	Picfeltarraenin IA	NB
	Picrinine	B, NB
	Picroside I	NB
	Picrotin	B
	Picrotoxinin	B
	Pimpinellin	B, NB
	Piperine	B, NB
	Plumbagin	B
	Podophyllotoxin	B, NB
	Polydatin	NB
	Polygalacic acid	NB
	Poncirin	NB
	Protopine	B, NB
	Prunasin	B, NB
	Pseudoephedrine	B,NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Herbal Markers / Herbal Extract	Pseudolaric acid B	NB
	Psilocin	B, NB
	Psilocybine	B, NB
	Psoralen / Isopsoralen	B
	Psoralen	NB
	Puerarin	B, NB
	Quercetin	NB
	Quercitrin	NB
	Raddeanin A	NB
	Resibufogenin	B, NB
	Resveratrol	B, NB
	Retrorsine	B
	Rhein	B, NB
	Rhodojaponin III	B
	Rhynchophylline (Corynoxine)	B, NB
	Ricinine	B
	Rosmarinic acid	NB
	Rotundine	B, NB
	Rutaecarpine	B, NB
	Rutin	NB
	Saikosaponin A	NB
	Saikosaponin C	NB
	Saikosaponin D	NB
	Salicin	NB
	Salidroside	B
	Salvianolic acid A	NB
	Sanguinarine	NB
	Schisandrin	B, NB
	Schisandrin C	B
	Schisantherin A	B, NB
	Schizandrin A (Deoxyschizandrin)	B, NB
	Scoparone	B, NB
	Scopolamine	B, NB
	Scopoletin	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Herbal Markers / Herbal Extract	Scutellarin	NB
	Senecionine	B, NB
	Seneciphylline	B, NB
	Sesamine	B, NB
	Senkirkin	NB
	Shikimic acid	NB
	Shikonin	NB
	6-Shogoal	B
	Silybin	NB
	Silymarin	NB
	Sinomenine	B, NB
	Solamargine	NB
	Solanine (alpha)	B
	Solanidine	B
	Solasodine	B, NB
	Solasonine	NB
	Solasurine	NB
	Sophoricoside	NB
	Sophoridin / Matrine	B, NB
	Stepholidine	B, NB
	Strictosamide (Isovincoside lactone)	B, NB
	Strophanthidin	B, NB
	Strophanthidol	B, NB
	Strophanthin G	NB
	Strychnine	B, NB
	Synephrine	B, NB
	Syringin	NB
	Tangeretin	NB
	Tanshinone I	B, NB
	Tanshinone II A	B, NB
	Tectorigenin	B, NB
	Tetrahydropalmatine	B, NB
	Tetrahydropalmatine metabolite(s)	B
	3', 4' 5, 7-Tetramethoxyflavone	NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Herbal Markers / Herbal Extract	Tetrahydroxystilbene glucoside	B
	Tetrandrine	B, NB
	Teucrin A	B
	Thevetin B	B
	Triptolide	NB
	Triptonide	NB
	Triptophenolide	B, NB
	beta-turmerone	B
	Umbelliferone	B, NB
	Usnic acid	B, NB
	Vanillin	B, NB
	Veratric acid	B, NB
	Veratridine	B, NB
	Veratrine	B
	Vindoline	NB
	Vitexicarpin (casticin)	B, NB
	Wogonin	B, NB
	Yohimbine	B, NB
	Yunaconitine	B, NB
Herbicides	Diquat	NB
	Glyphosate (Special test is required. Please indicate clearly in the request form)	B, NB
	Methabenzthiazuron	B, NB
	Paraquat (Special test is required. Please indicate clearly in the request form)	B, NB
Hormonal Chemotherapy	Anastrozole	NB
	Bicalutamide	B, NB
	Bicalutamide metabolite(s)	B
	Buserelin	NB
	Cyproterone	NB
	Enzalutamide	B
	Exemestane	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Hormonal Chemotherapy	Flutamide	B, NB
	Letrozole	B, NB
	Medroxyprogesterone	B, NB
	Megestrol	B, NB
	Tamoxifen	B, NB
	Tamoxifen metabolite(s)	B
Hyperuricemia & Gout Preparations	Allopurinol	B, NB
	Colchicine	B, NB
	Febuxostat	B
	Probenecid	B, NB
Hypnotics & Sedatives	Allobarbital	B
	Amobarbital / Pentobarbital	B, NB
	Barbital	NB
	Butabarbital	B, NB
	Butalbital	B, NB
	Chloral hydrate	NB
	Chloral hydrate metabolite(s)	B
	Chlormethiazole	B
	Estazolam	B, NB
	Estazolam metabolite(s)	B
	Etizolam	B, NB
	Flunitrazepam	B, NB
	Flunitrazepam metabolite(s)	B
	Flurazepam	B, NB
	Flurazepam metabolite(s)	B
	Glutethimide	B, NB
	Hexobarbital	B, NB
	Lormetazepam	B, NB
	Midazolam	B, NB
	Midazolam metabolite(s)	B
	Nimetazepam	B, NB
	Nimetazepam metabolite(s)	B
	Nitrazepam	B, NB
	Nitrazepam metabolite(s)	B

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Hypnotics & Sedatives	Pentobarbital /Amobarbital	B, NB
	Pentobarbital metabolite(s) / Amobarbital metabolite(s)	B
	Phenobarbital	B, NB
	Secobarbital	B, NB
	Temazepam	B, NB
	Temazepam metabolite(s)	B
	Tetrahydropalmatine metabolite(s)	B
	Triazolam	B, NB
	Triazolam metabolite(s)	B
	Xylazine	B
	Zolazepam	B
	Zolpidem	B, NB
	Zolpidem metabolite(s)	B
	Zopiclone	B, NB
	Zopiclone metabolite	B
Immunologicals	Pidotimod	B
Immunosuppressants	Azathioprine	B, NB
	Methotrexate	B, NB
	Mycophenolate	NB
	Mycophenolate mofetil	B, NB
	Mycophenolic acid	B
	Mycophenolic acid metabolite(s)	B
	Sirolimus	NB
	Tacrolimus	NB
	Teriflunomide	B
	Thalidomide	B, NB
	Thalidomide metabolite(s)	B
	Tofacitinib	NB
Keratolytics	Salicylic acid	NB
Laxatives	Bisacodyl	B, NB
	Bisacodyl metabolite(s)	B
	Oxyphenisatin	B
	Phenolphthalein	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Laxatives	Phenolphthalein metabolite(s)	B
	Sennoside A / B	B, NB
	Sennoside D	NB
Leanness-enhancing Agents	Cimaterol	NB
	Denopamine	NB
	Dobutamine	B, NB
	Dopexamine	NB
	Etilefrine	NB
	Fenoterol	NB
	Formoterol	NB
	Isoprenaline (Isoproterenol)	B, NB
	Isoxsuprine	NB
	Metaproterenol (Orciprenaline)	B, NB
	Methoxyphenamine	B, NB
	Pirbuterol	NB
	Procaterol	B, NB
	Ractopamine	NB
	Ritodrine	B, NB
	Salbutamol / Levosalbutamol (Levalbuterol)	B, NB
	Salmeterol	NB
	Terbutaline	B, NB
	Terbutaline metabolite(s)	B
	Xamoterol	NB
	Zilpaterol	NB
Macrolides	Acetylspiramycin	B
	Azithromycin	B, NB
	Clarithromycin	B, NB
	Clarithromycin metabolite(s)	B
	Erythromycin	B
	Roxithromycin	B, NB
	Spiramycine	B, NB
Melamine Derivatives	Ammelide	B
	Ammeline	B
Methylxanthines	Aminophylline	NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Methylxanthines	Caffeine	B, NB
	8-chlorotheophylline	B, NB
	Diprophylline (Dyphylline)	B, NB
	Theophylline	B, NB
Miscellaneous	Adenine	NB
	D&C Orange no.4	NB
	Melatonin	B, NB
	Melatonin metabolite(s)	B
	Metyrapone	B, NB
	Phenethylamine	B, NB
Muscle Relaxants	Atracurium	B, NB
	Atracurium metabolite(s)	B
	Baclofen	B, NB
	Carisoprodol	B, NB
	Chlormezanone	B, NB
	Chlorzoxazone	B, NB
	Cyclobenzaprine	B, NB
	Cyclobenzaprine metabolite(s)	B
	Dantrolene	B, NB
	Laudanosine	B
	Methocarbamol	B
	Mivacurium	NB
	Orphenadrine	B, NB
	Orphenadrine metabolite(s)	B
	Rocuronium	B
	Tizanidine	B, NB
	Tolperisone	B, NB
	Xylazine	B
Mydriatic Drugs	Atropine / Hyoscyamine	B, NB
	Homatropine	B, NB
	Phenylephrine	B, NB
	Tropicamide	NB
Nasal Decongestants	Naphazoline	B, NB
	Oxymetazoline	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Nasal Decongestants	Phenylephrine	B, NB
	Tetryzoline	B, NB
	Xylometazoline	B, NB
Neurodegenerative Disease Drugs	Donepezil	B, NB
	Galantamine	B, NB
	Riluzole	B, NB
	Rivastigmine	B, NB
	Distigmine	B
	Memantine	B
	Milnacipran	B, NB
	Neostigmine	NB
	Pyridostigmine	B, NB
	Riluzole	B, NB
	Tetrabenazine	B, NB
Nootropics & Neurotonics	Aniracetam	B
	Lipoic acid	B, NB
	Nimodipine	B, NB
	Phenibut	B
	Piracetam	B
	Pyritinol	B, NB
NSAIDs	Aceclofenac	B, NB
	Acemetacin	B
	Aminophenazone	B, NB
	Aspirin (Acetylsalicylic Acid)	B, NB
	Benzydamine	B, NB
	Celecoxib	B, NB
	Celecoxib metabolite(s)	B
	Diclofenac	B, NB
	Diclofenac metabolite(s)	B
	Dipyrone	NB
	Etodolac	B
	Etofenamate	B
	Etoricoxib	B, NB
	Etoricoxib metabolite(s)	B

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
NSAIDs	Ibuprofen	B, NB
	Ibuprofen metabolite(s)	B
	Indomethacin	B, NB
	Indomethacin metabolite(s)	B
	Ketoprofen	B, NB
	Ketoprofen metabolite(s)	B
	Ketorolac	B, NB
	Ketorolac metabolite(s)	B
	Mefenamic acid	B, NB
	Mefenamic acid metabolite(s)	B
	Meloxicam	B, NB
	Nabumetone	B, NB
	Naproxen	B, NB
	Naproxen metabolite(s)	B
	Nimesulide	B, NB
	Nimesulide metabolite(s)	B
	Oxaprozin	B
	Parecoxib	B
	Parecoxib metabolite(s)	B
	Phenazone (Antipyrine)	B, NB
	Phenazone metabolite(s)	B
	Phenylbutazone	B, NB
	Piroxicam	B, NB
	Piroxicam metabolite(s)	B
	Proglumetacin	NB
	Sulindac	B, NB
	Tenoxicam	B, NB
	Tiaprofenic acid	B, NB
	Valdecoxib	B, NB
	Valdecoxib metabolite(s)	B
Oestrogens & Progesterones & Related Synthetic Drugs	Dienogest	B
	Drospirenone	B, NB
	Estradiol	NB
	Ethinyloestradiol	NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Oestrogens & Progesterones & Related Synthetic Drugs	Gestodene	B, NB
	Levonorgestrel	B, NB
	Medroxyprogesterone	B, NB
	Norethisterone	B, NB
	Paroxypropione	B, NB
	Progesterone	B
	Tibolone	B, NB
Ophthalmic Decongestants	Naphazoline	B, NB
	Olopatadine	B
	Phenylephrine	B, NB
	Synephrine	B, NB
	Tetrahydrozoline	B
	Tetryzoline	B, NB
Opioids	6-Acetylcodeine	B
	Buprenorphine	B, NB
	Buprenorphine metabolite(s)	B
	Codeine	B, NB
	Codeine metabolite(s)	B
	Dextropropoxyphene (Propoxyphene)	B, NB
	Dihydrocodeine	B, NB
	Dihydromorphine	B, NB
	Diphenoxylate	B, NB
	Diphenoxylate metabolite(s)	B
	Fentanyl	B, NB
	Fentanyl metabolite(s)	B
	Heroin (Diamorphine)	B, NB
	Heroin metabolite(s)	B
	Hydrocodone	B, NB
	Hydrocodone metabolite(s)	B
	Hydromorphone	B, NB
	Methadone	B, NB
	Methadone metabolite(s)	B
	Morphine	B, NB
	Morphine metabolites(s)	B

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Opioids	Oxycodone	B, NB
	Oxycodone metabolite(s)	B
	Oxymorphone	B, NB
	Pentazocine	B, NB
	Pethidine (Meperidine)	B, NB
	Pethidine (Meperidine) metabolite(s)	B
	Pholcodine	B, NB
	Pholcodine N-oxide	B
	Propoxyphene (Dextropropoxyphene)	B, NB
	Propoxyphene (Dextropropoxyphene) metabolite(s)	B
	Thebaine	B, NB
	Tramadol	B, NB
	Tramadol metabolite(s)	B
Oral Antidiabetic Agents	Acetohexamide	B, NB
	Alogliptin	B, NB
	Buformin	B, NB
	Canagliflozin	B, NB
	Canagliflozin metabolite(s)	B
	Chlorpropamide	B, NB
	Dapagliflozin	B, NB
	Dapagliflozin metabolite(s)	B
	Empagliflozin	B, NB
	Empagliflozin metabolite(s)	B
	Glibenclamide	B, NB
	Glibenclamide metabolite(s)	B
	Gliclazide	B, NB
	Gliclazide metabolites(s)	B
	Glimepiride	B, NB
	Glimepiride metabolite(s)	B
	Glipizide	B, NB
	Glipizide metabolite(s)	B
	Gliquidone	B, NB
	Ipragliflozin	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Oral Antidiabetic Agents	Linagliptin	B, NB
	Metformin	B, NB
	Nateglinide	B, NB
	Phenformin	B, NB
	Phenformin metabolite(s)	B
	Pioglitazone	B, NB
	Pioglitazone metabolite(s)	B
	Repaglinide	B, NB
	Repaglinide metabolite(s)	B
	Rosiglitazone	B, NB
	Rosiglitazone metabolite(s)	B
	Saxagliptin	B, NB
	Sitagliptin	B, NB
	Tofogliflozin	B, NB
	Tolazamide	B, NB
	Tolbutamide	B, NB
	Tolbutamide metabolite(s)	B
	Vildagliptin	B, NB
	Vildagliptin metabolite(s)	B
Oral Contraceptives	Cyproterone	NB
	Drospirenone	B, NB
	Ethinyloestradiol	NB
	Gestodene	B, NB
	Levonorgestrel	B, NB
	Mifepristone	B
	Norethisterone	NB
Organophosphates	Acephate	B
	Chlorpyrifos	B
	Chlorpyrifos metabolite(s)	B
	Diazinon (Dimpylate)	B, NB
	Dichlorvos	NB
	Ethion	B
	Fenitrothion	B, NB
	Fenthion metabolite(s)	B

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Organophosphates	Malathion	B, NB
	Methidathion	B
	Omethoate	B
	Tetrachlorvinphos	NB
Other Agents Affecting Metabolism	Diazoxide	B, NB
	Lipoic acid	B, NB
Other Antibiotics	Aztreonam	NB
	Chlorquinaldol	NB
	Cilastatin	B
	Clindamycin	B, NB
	Fusidate	NB
	Lincomycin	B, NB
	Linezolid	NB
	Meropenem	B
	Metronidazole	B, NB
	Nifuroxazide	B, NB
	Nitrofurantoin	B, NB
	Rifabutin	B, NB
	Tazobactam	B
	Tinidazole	B, NB
	Trimethoprim	B, NB
Other Antihypertensives	Ambrisentan	NB
	Bendazol (Dibazol)	B, NB
	Bosentan	B, NB
	Clonidine	B, NB
	Diazoxide	B, NB
	Hydralazine	B, NB
	Hydralazine metabolite(s)	B
	Macitentan	NB
	Methyldopa	B
	Minoxidil	B, NB
	Minoxidil metabolite(s)	B
	Moxonidine	B
	Phenoxybenzamine	NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Other Antihypertensives	Phentolamine	B
	Phentolamine methanesulphonate	NB
	Prazosin	B, NB
	Reserpine	B, NB
	Terazosin	B, NB
	Terazosin metabolite(s)	B
Other Antiprotozoal Agents	Pentamidine	B, NB
Other CNS Drugs & Agents for ADHD	Atomoxetine	B, NB
	Lisdexamfetamine	B, NB
	Pemoline	NB
	Methylphenidate	B, NB
	Methylphenidate metabolite(s)	B
Other Dermatologicals	Finasteride	B, NB
	Hydroquinone	B
	Imiquimod	B, NB
	Minoxidil	B, NB
	Minoxidil metabolite(s)	B
Other Drugs Acting on the Genito-Urinary System	Carbachol	B
	Dapoxetine	B, NB
	Phenazopyridine	B, NB
	Phenazopyridine metabolite(s)	B
	Solifenacin	B, NB
Other Drugs of Abuse	Iso-LSD	B
	Ketamine	B, NB
	Ketamine metabolite(s)	B
	Lysergic acid diethylamide (LSD)	B, NB
	LSD metabolite(s)	B
	Mescaline	B, NB
	Methaqualone	B, NB
	2-Oxo-3-hydroxy-LSD	B. NB
	Phencyclidine (PCP)	B, NB
	Phentermine	B, NB
	Psilocin	B, NB
	Psilocybine	NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Other Insecticides	Aldrin	B
	Amitraz	NB
	Anabasine	B, NB
	Camphor	B
	Cyromazine	NB
	o,p'-DDD	NB
	Dieldrin	B
	N,N-Diethyl-m-toluamide	B, NB
	2,4-Dinitrophenol	B, NB
	Endrin	B
	Fenvalerate	NB
	Fipronil	B, NB
	Heptachlor	B
	Heptachlor epoxide	B
	Imidacloprid	B, NB
	Indoxacarb	B, NB
	Naphthalene	B, NB
	Naphthalene metabolite(s)	B
	Paradichlorobenzene	B
	Piperonyl butoxide	B, NB
	Pirimiphos methyl	NB
	Rotenone	B, NB
	Rotenone metabolite(s)	B
Penicillins	Amoxicillin/Amoxycillin	B
	Ampicillin	B, NB
	Bacampicillin	B, NB
	Benzylpenicillin	B, NB
	Cloxacillin	B, NB
	Dicloxacillin	NB
	Flucloxacillin	B, NB
	Oxacillin	B, NB
	Penicillin G	B
	Phenoxymethylpenicillin	B, NB
	Piperacillin	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Penicillins	Sultamicillin	NB
	Ticarcillin	B
	Ticarcillin metabolite(s)	B
Peripheral Vasodilators & Cerebral Activators	Betahistine	NB
	Cinnarizine	B, NB
	Dihydroergocornine	NB
	Dihydroergocristine	NB
	Dihydroergocryptine	NB
	Ethamivan	NB
	Etofylline	NB
	Hexobendine	B, NB
	Isoxsuprine	NB
	Naftidrofuryl	B, NB
	Nicergoline	B, NB
	Nimodipine	B, NB
	Papaverine	B, NB
	Papaverine metabolite(s)	B
	Raubasine (Ajmalicine)	B, NB
	Tolazoline	B, NB
	Vincamine	B
Piperazine Derivatives	Benzylamine	B
	BZP (1-Benzylpiperazine)	B, NB
	mCPP (meta-chlorophenylpiperazine)	B, NB
	1-(3-chlorobenzyl) piperazine	B, NB
	DBP (1,4-Dibenzylpiperazine)	B, NB
	1-(4-Fluorobenzyl) piperazine	B, NB
	pFPP (para-fluorophenylpiperazine)	B, NB
	pMeOPP [1-(4-methoxyphenyl)piperazine]	B, NB
	MDBP [1-(3,4-Methylenedioxybenzyl)piperazine]	B
	1-(4-Methoxybenzyl) piperazine	B, NB
	4-(1-Piperazinyl)phenol	B, NB
	TFMPP [1-(3-Trifluoromethylphenyl) piperazine]	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Preservatives	Benzoic acid	NB
	Ethylparaben	NB
	2-Phenylphenol	B, NB
	Propylparaben	NB
Psoriasis, Seborrhea & Ichthyosis Preparations	Acitretin	NB
	Methoxsalen (Xanthotoxin)	B, NB
Pyrethroids	Allethrin	B, NB
	Cyfluthrin	B
	Cypermethrin	B
	Deltamethrin	B
	Empenthrin	B
	Esbiothrin	B, NB
	Fenpropathrin	B, NB
	Imiprothrin	B, NB
	Phenothrin	B, NB
	3-Phenoxybenzoic acid	B
	Pyrethrin	NB
	S-Bioallethrin	NB
	Tetramethrin	B, NB
Quinolones	Ciprofloxacin	B, NB
	Ciprofloxacin metabolite(s)	B
	Clinafloxacin	NB
	Enrofloxacin	B
	Gatifloxacin	B, NB
	Gemifloxacin	NB
	Lomefloxacin	B
	Levofloxacin / Ofloxacin	B, NB
	Moxifloxacin	B, NB
	Nalidixic acid	B, NB
	Norfloxacin	B,
	Ofloxacin / Levofloxacin	B, NB
	Pefloxacin	NB
	Pipemidic acid	B, NB
	Sparfloxacin	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Respiratory Stimulants	Almitrine	B, NB
	Doxapram	B, NB
Rodenticides	ANTU (alpha-naphthylthiourea)	B, NB
	Brodifacoum	B, NB
	Bromadiolone	B, NB
	Chlorophacinone	B, NB
	Coumachlor	NB
	Coumafuryl	NB
	Coumatetralyl	B, NB
	Coumatetralyl metabolite(s)	B
	Difenacoum	NB
	Difethialone	NB
	Diphacinone	NB
	Flocoumafen	B, NB
	Pindone	NB
	Tetramine	NB
	Warfarin	B, NB
	Warfarin metabolite(s)	B
Selective Estrogen Receptor Modulator	Clomiphene	B, NB
	Raloxifene	B, NB
Somatostatin Analogues	Octreotide	NB
Sulphonamides	Sulfacetamide	B
	Sulfadiazine	B,
	Sulfapyridine	B, NB
	Sulfathiazole	B, NB
	Sulfamethazine	B, NB
	Sulfamethoxazole	B, NB
	Sulfamethoxazole metabolite(s)	B
Superwarfarins & Warfarin	Brodifacoum	B, NB
	Bromadiolone	B,NB
	Chlorophacinone	B, NB
	Coumachlor	NB
	Coumafuryl	NB
	Coumatetralyl	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Superwarfarins & Warfarin	Coumatetralyl metabolite(s)	B
	Difenacoum	NB
	Difethialone	NB
	Diphacinone	NB
	Flocoumafen	B, NB
	Pindone	NB
	Warfarin	B, NB
	Warfarin metabolite(s)	B
Targeted Cancer Therapy	Crizotinib	B
	Erlotinib	B, NB
	Gefitinib	B
	Imatinib	B, NB
	Lapatinib	NB
	Nilotinib	B, NB
	Pazopanib	B
	Regorafenib	B
	Sorafenib	B, NB
	Sunitinib	B, NB
Tetracyclines	Chlortetracycline	NB
	Doxycycline	B, NB
	Minocycline	B, NB
	Oxytetracycline	B, NB
	Tetracycline	B, NB
Thyroid Hormones	Di-iodothyronine (T2)	NB
	Thyroxine (T4)	NB
	Tri-iodothyronine (T3)	NB
Thyroid Hormones Analogues	Tri-iodothyroacetic acid (T3A)	NB
Tobacco	Anabasine	B, NB
	Nicotine	B, NB
	Nicotine metabolite(s)	B
Vasoconstrictors	Ephedrine	B, NB
	Etilefrine	NB
	Midodrine	B, NB

Class	**Test (parent compound or metabolite)**	**Specimen Type Coverage (B: Biological specimen) (NB: Non-biological specimen)**
Vasoconstrictors	Norephedrine	B
	Norepinephrine	B
	Phenylephrine	B, NB
Vitamins	Acetomenaphthone	NB
	Calciferol	B
	Nicotinamide (Niacinamide)	B, NB
	Phytomenadione (Vit K1)	NB
	Pyridoxine (Vit B6)	B, NB
	Riboflavine (Vit B2)	NB
	Thiamine (Vit B1)	NB
	Thiamine disulfide	NB
Volatile Organic Compounds	Toluene metabolite (Hippuric acid)	B
	Xylene metabolite (Methyl hippurate)	B

Appendix C

Coverage of Urine Drug of Abuse

Class	**Test** **(parent compound or metabolite)**
Aminoindane	2-AI (2-Aminoindane)
	5-IAI (5-Iodo-2-aminoindane)
	MDAI (5,6-Methylenedioxy-2-aminoindane)
	MMAI (5-Methoxy-6-methyl-2-aminoindane)
	NM-2-AI (N-Methyl-2-aminoindane)
	NM-2-AI (N-Methyl-2-aminoindane) metabolite(s)
Amphetamine	Amphetamine
	Amphetamine metabolite(s)
	2-APB (alpha-Methyl-2-benzofuranethanamine)
	5-APB (5-(2-Aminopropyl)benzofuran) or its isomer
	5-APDB (5-(2-aminopropyl)-2,3-dihydrobenzofuran)
	5-APDI (5-(2-Aminopropyl)-2,3-dihydro-1H-indene)
	4-Bromoamphetamine
	Bromo-DragonFLY
	6-Bromo-MDMA
	Camfetamine
	4-Chloroamphetamine
	6-Chloro-MDMA
	4-Chloromethamphetamine
	4-Chloromethamphetamine metabolite(s)
	3C-P (3,5-Methoxy-4-propoxyamphetamine)
	3,4-Dimethoxyamphetamine NBOMe
	2,5-DMA (2,5-Dimethoxyamphetamine)
	3,4-DMA (3,4-Dimethoxyamphetamine)
	DOB (2,5-Dimethoxy-4-bromoamphetamine)
	DOET (2,5-Dimethoxy-4-ethylamphetamine)
	DOI (2,5-Dimethoxy-4-iodoamphetamine)
	DOM (2,5-Dimethoxy-4-methylamphetamine)
	5-EAPB (5-(N-Ethyl-2-aminopropyl)benzofuran) or its isomer
	2-Ethylamino-1-phenylbutane

Class	**Test** **(parent compound or metabolite)**
Amphetamine	N-Ethylamphetamine
	4-Ethylamphetamine NBOMe
	4-Fluoroamphetamine or its isomer
	3-Fluoroethamphetamine or its isomer
	4-Fluoromethamphetamine or its isomer
	3-Fluorophenmetrazine
	Heliomethylamine (MDMA methylene homolog)
	5-IT (5-(2-Aminopropyl)indole)
	6-IT (6-(2-Aminopropyl)indole)
	2-MAPB (N,alpha-Dimethyl-2-benzofuranethanamine)
	6-MAPB (6-(N-Methyl-2-aminopropyl)benzofuran) or its isomer
	5-MAPDB (1-(2,3-Dihydrobenzofuran-5-yl)-N-methylpropan-2-amine)
	MBDB (alpha-Ethyl-N-methyl-1,3-benzodioxole-5-ethanamine)
	MDA (3,4-Methylenedioxyamphetamine) (MDMA metabolite)
	MDDMA (3,4-Methylenedioxydimethylamphetamine)
	MDEA (3,4-Methylenedioxy-N-ethylamphetamine)
	MDMA (3,4-Methylenedioxymethamphetamine)
	3,4-MDPA (3,4-Methylenedioxy-N-propylamphetamine)
	Methamnetamine
	Methamphetamine
	Methamphetamine metabolite(s)
	Methiopropamine
	2-Methoxyamphetamine
	4-Methoxy-N-ethylamphetamine
	4-Methylmethamphetamine
	4-Methylmethamphetamine metab/4-Methylamphetamine
	4-Methylthioamphetamine
	2-Methylamino-1-phenylbutane
	MMDA-2 (2-Methoxy-4,5-methylenedioxyamphetamine)
	Phendimetrazine
	Phendimetrazine metabolite(s)
	Phenmetrazine
	Pholedrine
	PMA (p-Methoxyamphetamine)

Class	**Test** **(parent compound or metabolite)**
Amphetamine	PMMA (p-Methoxymethamphetamine)
	PMMA (p-Methoxymethamphetamine) metabolite(s)
	N-Propylamphetamine
	2,4,5-TMA (2,4,5-Trimethoxyamphetamine)
	3,4,5-TMA (3,4,5-Trimethoxyamphetamine)
Arylcyclohexylamine	Benocyclidine
	2-Bromo deschloroketamine
	DCK (Deschloroketamine)
	N-Ethylnorketamine
	2F-DCK (2-Fluoro-deschloroketamine)
	2F-DCK (2-Fluoro-deschloroketamine) metabolite(s)
	Fluoro-2-oxo-PCE
	Fluoro-2-oxo-PCE metabolite(s)
	3-Hydroxy PCP
	3-Hydroxy PCE
	Ketamine
	Ketamine metabolite(s)
	Methoxetamine
	Methoxmetamine
	Methoxpropamine
	2-Methoxy ketamine
	3-Methoxy PCE or its isomer
	3-Methoxy PCE metabolite(s)
	3-Methoxyphencyclidine or its isomer
	2-oxo-PCE (Deschloro-ethyl-ketamine)
	2-oxo-PCE (Deschloro-ethyl-ketamine) metabolite(s)
	PCE (Eticyclidine)
	PCEEA (N-(2-Ethoxyethyl)-1-phenylcyclohexanamine)
	PCMPA (N-(3-Methoxypropyl)-1-phenylcyclohexanamine)
	PCPr (1-phenyl-N-propyl-cyclohexanamine)
	Phencyclidine (PCP)
	PRE-084
	N-Propylnorketamine
	Tenocyclidine
	Tiletamine

Class	**Test** **(parent compound or metabolite)**
Arylcyclohexylamine	Tiletamine metabolite(s)
Barbiturates	Butabarbital
	Pentobarbital / Amobarbital
	Pentobarbital metabolite(s) / Amobarbital metabolite(s)
	Phenobarbital
	Phenobarbital metabolite(s)
	Secobarbital
Benzodiazepine	Alprazolam
	Alprazolam metabolite(s)
	Bromazepam
	Bromazepam metabolite(s)
	Bromazolam
	Chlordiazepoxide
	Chlordiazepoxide metabolite(s)
	Cinazepam
	Clobazam
	Clobazam metabolite(s)
	Clobenzepam
	Clonazepam
	Clonazepam metabolite(s)
	Demoxepam
	Diazepam
	Diazepam metabolite(s)
	Diclazepam
	Difludiazepam (Ro 07-4065)
	Estazolam
	Etizolam
	Flubromazepam
	Flubromazolam metabolite(s)
	Flunitrazepam
	Flunitrazepam metabolite(s)
	Flunitrazolam
	Flurazepam
	Flurazepam metabolite(s)
	Lorazepam

Class	**Test** **(parent compound or metabolite)**
Benzodiazepine	Lormetazepam
	Meclonazepam
	Medazepam
	Midazolam
	Midazolam metabolite(s)
	Metizolam (Desmethyletizolam)
	Nifoxipam
	Nimetazepam
	Nimetazepam metabolite(s)
	Nitrazepam
	Nitrazepam metabolite(s)
	Nitrazolam
	Oxazepam
	Phenazepam
	Phenazepam metabolite(s)
	Pinazepam
	Prazepam
	Pyrazolam
	Temazepam
	Tetrazepam
	Triazolam
	Triazolam metabolite(s)
Cannabinoid	THC (Tetrahydrocannabinol)
	THC (Tetrahydrocannabinol) metabolite(s)
Cathinone	Benzedrone
	4-Bromo-alpha-pyrrolidinovalerophenone
	3-Bromomethcathinone
	4-Bromomethcathinone
	Buphedrone
	Butylone (bk-MBDB)
	Cathinone
	4-Chloro-N-butylcathinone
	4-Chloroethcathinone
	3-Chloromethcathinone or its isomer

Class	**Test** **(parent compound or metabolite)**
Cathinone	4-Chloropentedrone
	4-Chloro-alpha-pyrrolidinopropiophenone
	4-CIC (4-Chloro-N-isopropylcathinone)
	N-Cyclohexyl methylone
	N-Cyclohexyl methylone metabolite(s)
	3-Desoxy-3,4-methylenedioxypyrovalerone
	Dibutylone (bk-DMBDB)
	3,4-Dichloroethcathinone
	Diethylpropion
	Diethylpropion metabolite(s)
	3,4-Dimethoxy-alpha-ethylaminovalerophenone
	3,4-Dimethoxy-alpha-pyrrolidinopentiophenone
	3,4-Dimethylethcathinone
	3,4-Dimethylmethcathinone
	N,N-Dimethylpentylone
	Ethcathinone
	alpha-Ethylaminohexanophenone (N-Ethylhexedrone)
	4-Ethylethcathinone
	4-Ethylmethcathinone
	Ethylone (bk-MDEA)
	Eutylone
	Eutylone metabolite(s)
	N-Ethylpentedrone
	N-Ethylpentylone
	N-Ethylpentylone metabolite(s)
	Flephedrone (4-Fluoromethcathinone)
	Flephedrone (4-Fluoromethcathinone) metabolite (4-Fluoroephedrine)
	4-Fluoroethcathinone
	4-Fluoro IPV (4-fluoro-N-isopropyl-pentedrone)
	2-Fluoroisocathinone
	2-Fluoromethcathinone
	3-Fluoromethcathinone
	4-Fluoropentedrone
	4-Fluoro PV8 (4-Fluoro-alpha-pyrrolidinoheptanophenone) 4-Fluoro PV9 (4-Fluoro-alpha-pyrrolidino-octanophenone)

Class	**Test** **(parent compound or metabolite)**
Cathinone	4-Fluoro-alpha-pyrrolidinobutiophenone
	4-Fluoro-alpha-pyrrolidinopentiophenone
	alpha-Isopropylaminopentiophenone (2-IPP)
	MDPBP (3,4-Methylenedioxy-alpha-pyrrolidinobutiophenone)
	MDPPP (3,4-Methylenedioxy-alpha-pyrrolidinopropiophenone)
	MDPV (Methylenedioxypyrovalerone)
	MDPV (Methylenedioxypyrovalerone) metabolite(s)
	Mephedrone
	Mephedrone metabolite(s)
	Metamfepramone
	Metamfepramone metabolite(s)
	Methcathinone
	Methedrone or its isomer
	6-Methoxy methylone
	4-Methoxy PV8 (4-Methoxy-alpha-pyrrolidinoheptanophenone)
	4-Methoxy PV9 (4-Methoxy-alpha-pyrrolidino-octanophenone)
	4-Methoxy-alpha-pyrrolidinobutiophenone
	4-Methoxy-alpha-pyrrolidinopentiophenone
	N-Methylbenzedrone
	4-Methylbuphedrone or its isomer
	4-Methyl-N,N-dimethylcathinone
	3,4-Methylenedioxy-N-benzylcathinone
	3,4-Methylenedioxy-alpha-pyrrolidinohexanophenone
	4-Methylethcathinone or its isomer
	4-Methylethcathinone metabolite(s) (4-Methyl-N-ethyl-norephedrine)
	4-Methyl-N-ethyl-pentedrone
	Methylone
	2-Methylmethcathinone
	3-Methylmethcathinone
	3-Methylmethcathinone metabolite(s) (Methylephedrine)
	4-Methylpentedrone
	4-Methyl-alpha-pyrrolidinobutiophenone
	4-Methyl-alpha-pyrrolidinohexanophenone
	4-Methyl-alpha-pyrrolidinopropiophenone
	Mexedrone

Class	**Test (parent compound or metabolite)**
Cathinone	MTTA (Mephtetramine)
	Naphyrone
	NRG-3
	alpha-PAPP (alpha-Phthalimidopropiophenone)
	alpha-PBP (alpha-Pyrrolidinobutiophenone)
	alpha-PBT (alpha-Pyrrolidinobutiothiophenone)
	alpha-PCYP (alpha-Pyrrolidinocyclohexanophenone)
	Pentedrone
	Pentylone
	alpha-PHP (alpha-Pyrrolidinohexanophenone or PV-7)
	alpha-PiHP (alpha-Pyrrolidinoisohexanophenone)
	alpha-PNP (alpha-Pyrrolidinononanophenone)
	alpha-PPP (alpha-Pyrrolidinopropiophenone)
	alpha-Propylaminopentiophenone
	PV9 (alpha-Pyrrolidino-octanophenone)
	alpha-PVP (alpha-Pyrrolidinopentiophenone) metabolite(s)
	alpha-PVP (alpha-Pyrrolidinopentiophenone)
	alpha-PVT (alpha-Pyrrolidinopentiothiophenone)
	Pyrovalerone
Cocaine analogue	Cocaine
	Cocaine metabolite(s)
	Dimethocaine
	p-Fluorotropacocaine
Fentanyl analogue	Acetylfentanyl
	Acetylfentanyl metabolite(s)
	Acrylfentanyl (Acryloylfentanyl)
	AH-7921
	Alfentanil
	Alfentanil metabolite(s)
	Benzodioxole fentanyl
	Benzyl fentanyl
	N-Benzyl fluoro norfentanyl
	N-Benzyl furanyl norfentanyl
	N-Benzyl phenyl norfentanyl
	Butyryl fentanyl

Class	**Test (parent compound or metabolite)**
Fentanyl analogue	Butyryl fentanyl metabolite(s)
	Carfentanil
	Carfentanil metabolite(s)
	p-Chloroisobutyryl fentanyl
	Cyclopentyl fentanyl
	Cyclopropyl fentanyl
	Cyclopropyl fentanyl metabolite(s)
	Fentanyl
	Fentanyl metabolite(s)
	FIBF (p-Fluoroisobutyryl fentanyl)
	meta-Fluoro 4-ANBP (Despropionyl N-benzyl meta-fluoro norfentanyl)
	Furanyl fentanyl
	Furanyl fentanyl metabolite(s)
	Isobutyryl fentanyl metabolite(s)
	Methoxyacetyl fentanyl metabolite(s)
	p-Methoxy butyryl fentanyl
	N-Methyl cyclopropyl norfentanyl
	3-Methylfentanyl
	3-Methylfentanyl metabolite(s)
	Ocfentanil
	beta-Phenyl fentanyl (3-Phenylpropanoyl fentanyl)
	Phenyl fentanyl (Benzoyl fentanyl)
	Sufentanil
	Sufentanil metabolite(s)
	Tetrahydrofuran fentanyl
	2,2,3,3-Tetramethyl-cyclopropyl fentanyl
	Thiophene fentanyl (Thiofuranyl fentanyl)
	Valeryl fentanyl
LSD analogue	ALD-52 (1-Acetyl LSD)
	AL-LAD (N-Allylnorlysergic acid N,N-diethylamide)
	LAMPA (Lysergic acid N,N-methylpropylamide)
	LAMPA (Lysergic acid N,N-methylpropylamide) metabolite(s)
	1B-LSD (1-Butanoyl-LSD)
	1cP-LSD (1-Cyclopropionyl LSD)

Class	**Test** **(parent compound or metabolite)**
LSD analogue	1P-LSD (1-Propionyl LSD)
	LSD (Lysergic acid diethylamide)
	LSD (Lysergic acid diethylamide) metabolite(s)
	LSM-775 (Lysergic acid morpholide)
Miscellaneous	Aminorex
	mCPP (m-Chlorophenylpiperazine)
	Desoxypipradrol
	Dextromethorphan
	Dextromethorphan metabolite(s)
	3,4-Dichloromethylphenidate
	Dihydrokavain
	Diphenidine
	Diphenoxylate
	DMAA (Dimethylamylamine)
	4,4-DMAR (4,4-Dimethylaminorex)
	Elemicin
	Ethylphenidate
	Ethylphenidate metabolite(s) / Methylphenidate metabolite(s)
	4-Fluoroethylphenidate
	7-Hydroxymitragynine
	Kavain
	Methadone
	Methadone metabolite(s)
	Methaqualone
	Methoxphenidine (2-MeO-diphenidine)
	Methoxphenidine (2-MeO-diphenidine) metabolite(s)
	Mitragynine
	Mitragynine metabolite(s)
	Myristicin
	Noscapine
	Noscapine metabolite(s)
	Octodrine
	Pemoline
	Pethidine (Meperidine)
	Pethidine (Meperidine) metabolite(s)

Class	**Test** **(parent compound or metabolite)**
Miscellaneous	Phenibut
	Salvinorin A
	Salvinorin A metabolite(s) (Salvinorin B)
	Thiopental
	URB447
	URB597
	URB602
	URB754
	URB937
	W-18
	Yangonin
	Yohimbine
	Zaleplon
	Zolazepam
	Zolazepam metabolite(s)
	Zolpidem
	Zolpidem metabolite(s)
	Zopiclone
	Zopiclone metabolite(s)
NBOMe	25B-NBOH
	25C-NBOH
	25B-NBOMe
	25B-NBOMe metabolite(s)
	25C-NBOMe
	25C-NBOMe metabolite(s)
	30C-NBOMe
	25D-NBOMe
	25E-NBOMe
	25G-NBOMe
	25H-NBOMe
	25I-NBF
	25I-NBMD
	25I-NBOH
	25I-NBOMe 3-methoxy isomer
	25I-NBOMe 4-methoxy isomer

Class	**Test** **(parent compound or metabolite)**
NBOMe	25I-NBOMe
	25I-NBOMe metabolite(s)
	25IP-NBOMe
	25N-NBOMe
	25P-NBOMe
	25T2-NBOMe
	25T4-NBOMe
	25T7-NBOMe
	25T-NBOMe
	3,4-Dimethoxyamphetamine NBOMe
	4-Ethylamphetamine NBOMe
	Mescaline-NBOMe
Opioids	6-Acetylcodeine
	5-Aminoisotonitazene
	Bromadoline (U-47931E)
	Buprenorphine
	Buprenorphine metabolite(s)
	Butorphanol
	Codeine
	Codeine metabolite(s)
	Desomorphine
	Dihydrocodeine
	Dihydrocodeine metabolite(s)
	Ethylmorphine
	Heroin
	Heroin metab_6-MAM
	Hydrocodone
	Hydrocodone metabolite(s)
	Hydromorphone
	Isotonitazene metabolite(s)
	Morphine
	Morphine metabolite(s)
	Nalorphine
	Nitazene metabolite(s)
	Oxycodone

Class	**Test (parent compound or metabolite)**
Opioids	Oxycodone metabolite(s)
	Oxymorphone
	Papaverine
	Papaverine metabolite(s)
	Protonitazene metabolite(s)
	Tapentadol
	Thebaine
	Tilidine
	U-47700
	U-47700 metabolite(s)
	U-48800
	U-49900
	U-49900 metabolite(s)
	U-47931E (Bromadoline)
	U-51754
Phenethylamine	5-AEDB (5-(2-Aminoethyl)-2,3-dihydrobenzofuran)
	BDB (1,3-Benzodioxolylbutanamine)
	4-CAB (4-Chlorophenylisobutylamine)
	bk-2C-B
	2C-B (4-Bromo-2,5-dimethoxyphenethylamine)
	2C-B-Fly
	2C-C
	2C-E (2,5-Dimethoxy-4-ethylphenethylamine)
	2C-G (2,5-Dimethoxy-3,4-dimethylphenethylamine)
	2C-H (2,5-Dimethoxyphenethylamine)
	2C-I (2,5-Dimethoxy-4-iodophenethylamine)
	2C-N (2,5-Dimethoxy-4-nitrophenethylamine)
	2C-P (2,5-Dimethoxy-4-propylphenethylamine)
	2C-T (2,5-Dimethoxy-4-methylthiophenethylamine)
	2C-T-2 (2,5-Dimethoxy-4-ethylthiophenethylamine)
	2C-T-4 (2,5-Dimethoxy-4-isopropylthiophenethylamine)
	2C-T-7 (2,5-Dimethoxy-4-propylthiophenethylamine)
	Ephenidine
	Escaline
	Mescaline

Class	**Test** **(parent compound or metabolite)**
Phenethylamine	4-Methoxyphenethylamine
Piperazine Derivatives	BZP (Benzylpiperazine)
	1-(3-Chlorobenzyl)piperazine
	1,4-Dibenzylpiperazine
	2,3-Dichlorophenylpiperazine
	1-(4-Fluorobenzyl)piperazine
	MBZP (Methylbenzylpiperazine)
	MDBP (Methylenedioxybenzylpiperazine)
	1-(4-Methoxybenzyl)piperazine
	MT-45 (1-Cyclohexyl-4-(1,2-diphenylethyl)piperazine)
	pFPP (1-(4-Fluorophenyl)piperazine)
	pMeOPP (1-(4-Methoxyphenyl)piperazine)
	TFMPP (Trifluoromethylphenyl-piperazine)
	TFMPP (Trifluoromethylphenyl-piperazine) metabolite(s)
Pyrrolidine	D2PM (Diphenylprolinol)
	Desoxy-D2PM (2-Diphenylmethylpyrrolidine)
Synthetic cannabinoid	A-796260
	A-834735
	A-836339
	AB-CHMINACA
	AB-CHMINACA metabolite(s)
	AB-FUBINACA
	AB-FUBINACA metabolite(s)
	AB-FUBINACA 2-fluorobenzyl isomer
	AB-PINACA
	AB-PINACA metabolite(s)
	ADB-BICA
	ADB-CHMICA
	ADB-FUBINACA
	ADBICA
	ADBICA metabolite(s)
	ADB-BUTINACA
	ADB-BUTINACA metabolite(s)
	ADB-PINACA
	ADB-PINACA metabolite(s)

Class	**Test** **(parent compound or metabolite)**
Synthetic cannabinoid	AKB48 N-4-fluorobenzyl analog
	AKB48 metabolite(s)
	AM1241
	AM1248 azepane isomer
	AM1248
	AM2201
	AM2201 metabolite(s)
	AM2201 benzimidazole analog (FUBIMINA)
	AM2201 benzimidazole analog (FUBIMINA) metabolite(s)
	AM2232
	AM2233
	AM251
	AM630 (6-Iodopravadoline)
	AM679
	AM694 metabolite(s)
	AMB metabolite(s)
	APP-FUBINACA
	BB-22 (QUCHIC)
	BB-22 (QUCHIC) metabolite(s)
	5-Bromo THJ 018
	CBD (Cannabidiol)
	CBD (Cannabidiol) metabolite(s)
	CBN (Cannabinol)
	5-Chloro AB-PINACA (5-chloro ABP)
	CP 47,497
	CP 47,497-C8-homolog
	CP 55,940
	CUMYL-4CN-BINACA
	CUMYL-PeGACLONE (SGT-151)
	CUMYL-PICA
	CUMYL-PICA metabolite(s)
	CUMYL-THPINACA
	4-Cyano CUMYL-BUT7AICA (CUMYL-4CN-B7AICA)
	EAM2201
	EG 018

Class	**Test** **(parent compound or metabolite)**
Synthetic cannabinoid	EG2201
	F2201
	F2201 metabolite(s)
	FDU-PB-22
	5-Fluoro AB-PINACA
	5-Fluoro AB-PINACA metabolite(s)
	5-Fluoro ADB (5F-MDMB-PINACA) metabolite(s)
	5-Fluoro ADB-PINACA
	5-Fluoro ADB-PINACA metabolite(s)
	5-Fluoro ADBICA
	5-Fluoro ADBICA metabolite(s)
	5-Fluoro AEB (5-fluoro EMB-PINACA)
	5-Fluoro AKB48
	5-Fluoro AKB48 metabolite(s)
	5-Fluoro AMB
	5-Fluoro AMB metabolite(s)
	5-Fluoro APICA (STS-135)
	5-Fluoro BEPIRAPIM (NNL-2)
	5-Fluoro CUMYL-P7AICA
	5-Fluoro CUMYL-PICA
	5-Fluoro CUMYL-PICA metabolite(s)
	5-Fluoro CUMYL-PINACA
	5-Fluoro MDMB-PICA
	5-Fluoro MDMB-PICA metabolite(s)
	5-Fluoro NNEI 2-naphthyl isomer
	5-Fluoro NNEI
	5-Fluoro PB-22
	5-Fluoro PB-22 metabolite(s)
	5-Fluoro PCN
	5-Fluoro phenyl-PICA (LTI-701)
	5-Fluoro PY-PICA
	5-Fluoro PY-PINACA
	5-Fluoro SDB-005
	5-Fluoro SDB-006
	5-Fluoro-3,5-AB-PFUPPYCA

Class	**Test** **(parent compound or metabolite)**
Synthetic cannabinoid	FUB-NPB-22
	FUB-PB-22
	HU-210 / HU-211 (Dexanabinol)
	HU-331
	JWH-007
	JWH-015
	JWH-016
	JWH-016 metabolite(s)
	JWH-018
	JWH-018 metabolite(s)
	JWH-018 adamantyl carboxamide (APICA)
	JWH-019
	JWH-019 metabolite(s)
	JWH-020
	JWH-030
	JWH-031
	JWH-071
	JWH-072
	JWH-073
	JWH-073 metabolite(s)
	JWH-080
	JWH-081
	JWH-081 metabolite(s)
	JWH-116
	JWH-122
	JWH-122 metabolite(s)
	JWH-145
	JWH-167
	JWH-175
	JWH-176
	JWH-180
	JWH-193
	JWH-198
	JWH-200
	JWH-200 metabolite(s)

Class	**Test** **(parent compound or metabolite)**
Synthetic cannabinoid	JWH-203 metabolite(s)
	JWH-210 metabolite(s)
	JWH-213
	JWH-249
	JWH-250
	JWH-250 metabolite(s)
	JWH-251
	JWH-302
	JWH-307
	JWH-368
	JWH-387
	JWH-398 metabolite(s)
	JWH-412
	JWH-412 metabolite(s)
	JWH-424
	MAB-CHMINACA
	MAB-CHMINACA metaboliite(s)
	MAM2201
	MAM2201 metabolite(s)
	MDA-19
	MDMB-3en-BUTINACA metabolite(s)
	MDMB-BUTINACA metabolite(s)
	MDMB-4en-PICA metabolite(s)
	MDMB-4en-PINACA
	MDMB-4en-PINACA metabolite(s)
	MDMB-CHMCZCA
	MDMB-CHMCZCA metaboliite(s)
	MDMB-CHMICA
	MDMB-FUBICA metaboliite(s)
	MDMB-FUBINACA
	MDMB-FUBINACA metabolite(s)
	Mepirapim (JWH 018-4(methylpiperazine))
	MMB2201
	MMB-4en-PINACA metabolite(s)
	MMB-FUBICA

Class	**Test (parent compound or metabolite)**
Synthetic cannabinoid	MMB-FUBICA metabolite(s)
	MN-18
	MN-18 metabolite(s)
	MO-CHMINACA
	NM2201
	NM2201 metabolite(s)
	NNEI
	PB-22
	PB-22 metabolite(s)
	PTI-1 (N-Pentyl-3-thiazole-indole analogue 1)
	PX 1 (5-Fluoro APP-PICA)
	RCS-4 metabolite(s)
	RCS-4
	SDB-006
	THJ-018
	THJ-018 metabolite(s)
	THJ2201
	THJ2201 metabolite(s)
	UR-144
	UR-144 metabolite(s)
	WIN 55212-2
	XLR-11 metabolite(s)
Tryptamine	4-Acetoxy MALT (4-Acetoxy-N-methyl-N-allyl tryptamine)
	4-Acetoxy MALT metabolite(s)
	4-Acetoxy MET (4-Acetoxy-N-methyl-N-ethyltryptamine)
	4-Acetoxy MET metab/4-Acetoxy-DMT (4-Acetoxy-N,N-dimethyltryptamine)
	4-Acetoxy MPT (4-Acetoxy-N-methyl-N-propyltryptamine)
	DET (N,N-Diethyltryptamine)
	alpha-Ethyltryptamine
	4-Hydroxy DET (4-Hydroxy diethyltryptamine)
	4-Hydroxy MALT (4-Hydroxy-N-methyl-N-allyl tryptamine)
	4-Hydroxy MET (4-Hydroxy-N-methyl-N-ethyltryptamine)
	5-MeO-DALT (N,N-Diallyl-5-methoxytryptamine)
	5-MeO-DIPT (5-Methoxy-N,N-diisopropyltryptamine)

Class	**Test** **(parent compound or metabolite)**
Tryptamine	5-MeO-DIPT metabolite(s)
	5-MeO-DMT (N,N-Dimethyl-5-methoxytryptamine)
	5-MeO-EiPT (5-Methoxy-N-ethyl-N-isopropyltryptamine)
	5-MeO-EiPT metabolite(s)
	5-MeO-MiPT (5-Methoxy-N-methyl-N-isopropyltryptamine)
	5-MeO-MiPT metabolite(s)
	5-Methoxy-alpha-ethyltryptamine
	5-Methoxy-alpha-methyltryptamine
	5-Methyl-N,N-dimethyltryptamine
	alpha-Methyltryptamine
	DiPT (N,N-Diisopropyltryptamine)
	DMT (N,N-Dimethyltryptamine)
	DMT (N,N-Dimethyltryptamine) metabolite(s)
	DPT (N,N-Dipropyltryptamine)
	Psilocin

Appendix D

Coverage of Anabolic Steroids

Class	**Test (parent compound or metabolite)**
Testosterone and its derivatives	Boldenone
	Boldenone acetate
	Boldenone undecylenate
	Clostebol
	Clostebol acetate
	Dehydroepiandrosterone (DHEA)
	Epitestosterone
	Fluoxymesterone
	Fluoxymesterone metabolite(s)
	Metandienone
	Methandriol
	Methyl-1-testosterone
	Methyltestosterone
	Methyltestosterone metabolite(s)
	Testosterone
	Testosterone acetate
	Testosterone caproate
	Testosterone cypionate
	Testosterone decanoate
	Testosterone enanthate
	Testosterone isocaproate
	Testosterone phenylpropionate
	Testosterone propionate
	Testosterone undecanoate
	Testosterone valerate
Dihydrotestosterone derivatives	1-Androstenedione
	Drostanolone
	Drostanolone metabolite(s)
	Mesterolone
	Methasterone

Class	**Test (parent compound or metabolite)**
Dihydrotestosterone derivatives	Methenolone
	Methenolone metabolite(s)
	Methenolone acetate
	Methenolone enanthate
	Oxandrolone
	Oxandrolone metabolite(s)
	Oxymetholone
	Stanozolol
	Stanozolol metabolite(s)
19-nor-testosterone and its derivatives	Bolandione
	Epinandrolone
	Nandrolone
	Nandrolone metabolite(s)
	Nandrolone decanoate
	Norbolethone
	19-Norclostebol
	17α-Trenbolone
	Trenbolone
	Trenbolone acetate
	Trenbolone enanthate
	Trenbolone hexahydrobenzylcarbonate
Others	4,6-Estradiene-3,17-dione