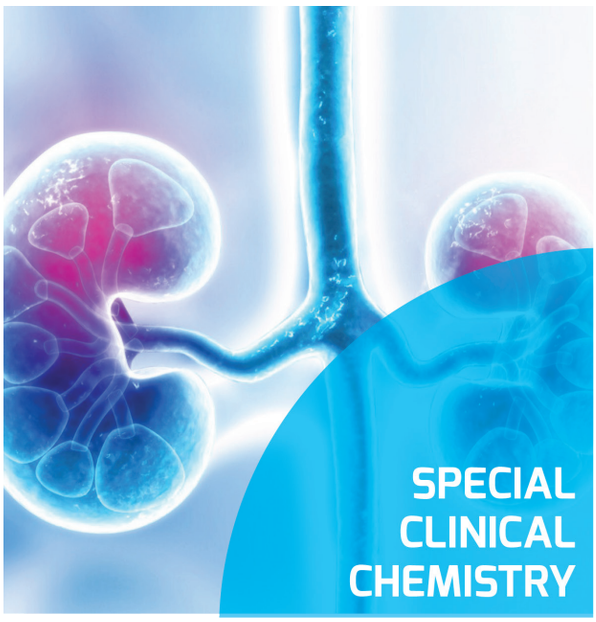
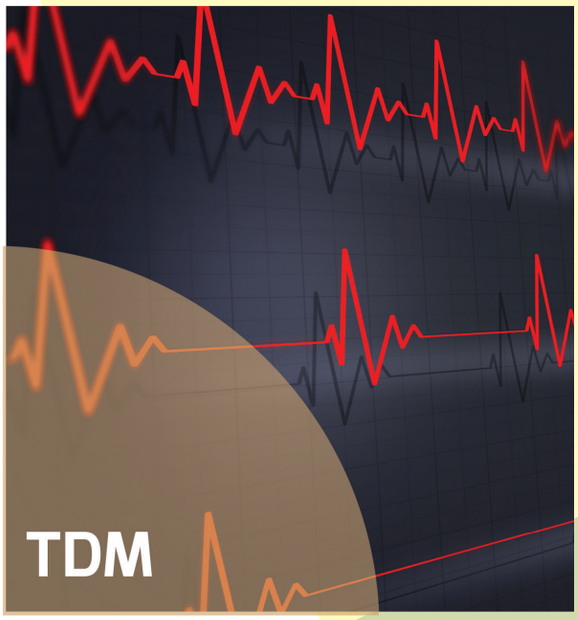
eureka Lab Division

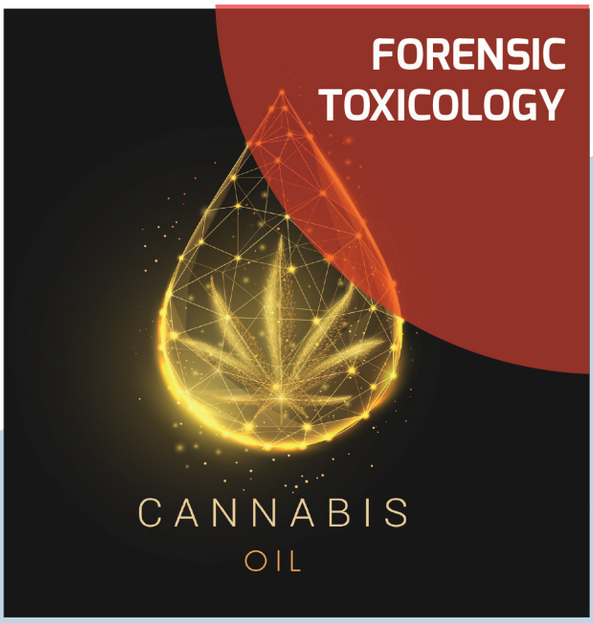
20 YEARS

CATALOGUE 2022

KITS, CALIBRATORS & CONTROLS FOR HPLC, GC, GC-MS, LC-MS/MS







SEPTEMBER 2022

20 YEARS

eureka Lab Division

"Over twenty years of service in clinical laboratories"

eureka Lab Division

AN ITALIAN COMPANY
THAT RESEARCHES, DEVELOPS AND
PRODUCES READY TO USE KITS USING
CHROMATOGRAPHIC TECHNIQUES
FOR CLINICAL LABORATORIES

eureka kit

THE WIDEST RANGE
OF DIAGNOSTIC KITS FOR
ANALYTICAL CHROMATOGRAPHIC
SYSTEMS
IN THE WORLD

pro training ASSISTANCE

THE ONLY PROFESSIONAL PATH
THAT PROVIDES
TRAINING AND ASSISTANCE
FOR LABORATORY STAFF
DURING AND AFTER
EUREKA KIT ADOPTION

eureka lyo

THE MOST DIVERSIFIED PORTFOLIO
OF LYOPHILIZED CONTROLS
AND CALIBRATORS
IN THE WORLD

eureka tox

THE LARGEST RANGE
OF PRODUCTS FOR FORENSIC
TOXICOLOGY
IN THE WORLD

Company Profile

Twenty years ago, Dr. Gilberto Coppa and Dr. Stefano Sartori decided to pursue a professional path that few companies had developed.

To help doctors to properly formulate a diagnosis, they asked some laboratories about their problems and issues.

After collecting information relative to the problems arising from the use of amperometric and coulometric detectors they decided to "create"

Eureka Lab Division Research and Development Team

In order to be able to continuously meet clinical needs, the company has for several years been working with the

"Study Group of External Authors"

The company mission is:
TO SIMPLIFY, IMPROVE, STANDARDIZE
the analytical procedures existing in special clinical chemistry laboratories, thanks to the realization of
READY TO USE KITS
using HPLC, GC, GC-MS, LC-MS/MS chromatographic techniques.

The aim is to guarantee that clinical doctors:

- Formulate a correct diagnosis of illnesses
- Optimize pharmaceutical therapy
- Prevent the onset of some illnesses

The company vision is to become :
The World's Technical and Scientific Reference for all Clinical Biochemistry Laboratories that use Analytical Chromatography and Mass Spectrometry

For clinical laboratories that need to analyze and quantify endogenous molecules, drugs, biomarkers or others substances in a biological matrix (urine, plasma, serum, saliva, hair), Eureka kits are ready to use kits that are applied to chromatographic techniques (HPLC, GC, GC/MS, LC-MS/MS).

Eureka produces the most diversified portfolio of diagnostic kits for Special Clinical Chemistry, Therapeutic Drug Monitoring (TDM), Occupational Toxicology and Forensic Toxicology in the world.

They can **Solve Problems** present in clinical laboratories related to:

the use of IMMUNOCHEMICAL/RIA METHODS

- Inaccurate and insensitive analytical techniques
- Limited budget to expand the analytical panel
- Only a limited number of analysis run with one instrument

The use of HOME BREW METHODS

- Long pre-analytical preparations and analysis time
- Limited productivity
- High cost for some analysis
- Issues in managing suppliers of raw material and accessories
- Lack of reproducibility of analytical data
- Difficult interpretation of chromatograms
- Issues related to data conversion into report

It is also important to mention that the Chromatographic Analytical Techniques as well as the Immunometric ones can be

Automated

by utilizing preparators / purificators or even robots that can be linked (if necessary) directly to both liquid and gaseous chromatographs.

eureka kit

applied to the Chromatographic instruments
(HPLC, GC-GC/MS, LC /MS)

GUARANTEE

- Straightforward and Quick Sample Preparation
- Robust, Fast and Reliable CE-IVD Methods
- Multiparametric Run, with Option to be Automated
- Time and Cost Optimization
- Stability for 3 years
- Post Sales Service and Training Courses

Lyophilized calibrators in matrix which are necessary to build the calibration curve are ALWAYS included in the Kit. These are used to calibrate the Chromatographic System for the quantitative measurement of the analyte contained in them. Each analyte has a concentration such as to allow the construction of a calibration curve on one point. These calibrators are lyophilized in human matrix and must be handled as if they were the patient sample itself.

There are also available **lyophilized Controls** in human matrix on bilevel or trilevel concentration mix solution, for monitoring and evaluating the fit of the calibration curve and the analytical session. These controls are used for internal quality control and serve to maintain the accuracy and precision of the analytical procedures dedicated to the quantitative determination of the analytes contained therein. They should be handled as if they were the patient sample itself.

The deuterated **Internal Standards (IS)** enclosed in the kits applied to LC-LC/MS are also supplied as Mix Solution.

A complete kit contains all reagents required to perform a single chromatographic run (buffer solution, derivatization and deproteinization solution, internal standards, calibrator, SPE-columns, wash and conditioning solution)

A single kit allows the execution of 50, 100, 200 or 500 tests and it can be applied to any conventional chromatographic system.

Additionally, **accessories and consumable products** (supplied by Agilent, Thermo Fisher, Restek) **are available separately**.

Please, be aware that our calibrators and controls have been developed to be used according to our instructions for use.

However, if you need to use them with a different method, please contact our technical team to the following e-mail address technicalassistance@eurekaone.com in order to receive specific advices and suggestions.

Eureka Lab Division operates in a Quality System Certified **ISO 9001:2015** and **ISO 13485:2016**.

Eureka products are registered with the Ministry of Health of Italy.

All Eureka kits are **IVD** and **CE** marked.

DNV

MANAGEMENT SYSTEM CERTIFICATE

Certificate no.:
CERT-14671-2004-AQ-ROM-SINCERT

Initial certification date:
03 August 2004

Valid:
11 June 2022 – 10 June 2025

This is to certify that the management system of

EUREKA S.r.l. - Lab Division

Via Enrico Fermi, 25 - 60033 Chiaravalle (AN) - Italy

has been found to conform to the Quality Management System standard:

ISO 9001:2015

This certificate is valid for the following scope:

Design, production and trade of in vitro diagnostic medical devices for HPLC and GC: kit ready to use and lyophilized human matrix calibrators/controls. Trade of preparative and analytical instrumentation, accessories and consumables applied to drug / clinical toxicology and forensic and special clinical chemistry (IAF 19, 12, 29)

Place and date:
Vimercate (MB), 06 April 2022

ACCREDIA
L'ENTE ITALIANO DI ACCREDITAMENTO

SGQ N° 003 A
SGA N° 003 D
SGE N° 007 M
SCR N° 004 F
EMAS N° 009 P
PRD N° 003 B
PRS N° 094 C
SSI N° 002 G

Membro di MLA EA per gli schemi di accreditamento SGQ, SGA, PRD, PRS, ISP, GHG, LAB e LAT, di MLA IAF per gli schemi di accreditamento SGQ, SGA, SSI, FSM e PRD e di MRA ILAC per gli schemi di accreditamento LAB, MED, LAT e ISP

For the issuing office:
DNV - Business Assurance
Via Energy Park, 14, - 20871 Vimercate (MB) - Italy

Claudia Baroncini
Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.

ACCREDITED UNIT: DNV Business Assurance Italy S.r.l., Via Energy Park, 14 - 20871 Vimercate (MB) - Italy - TEL: +39 68 99 905. www.dnv.it

DNV

MANAGEMENT SYSTEM CERTIFICATE

Certificate no.:
137423-2013-AQ-ITA-ACCREDIA

Initial certification date:
12 June 2013

Valid:
11 June 2022 – 10 June 2025

This is to certify that the management system of

EUREKA S.r.l. - Lab Division

Via Enrico Fermi, 25 - 60033 Chiaravalle (AN) - Italy

has been found to conform to the Quality Management System standard:

ISO 13485:2016

This certificate is valid for the following scope:

Design, production and placing on the market of in vitro diagnostic medical devices for HPLC and GC: kit ready to use and lyophilized human matrix calibrators/controls. Trade of preparative and analytical instrumentation, accessories and consumables applied to drug / clinical toxicology and forensic and special clinical chemistry

Place and date:
Vimercate (MB), 06 April 2022

ACCREDIA
L'ENTE ITALIANO DI ACCREDITAMENTO

SGQ N° 003 A
SGA N° 003 D
SGE N° 007 M
SCR N° 004 F
EMAS N° 009 P
PRD N° 003 B
PRS N° 094 C
SSI N° 002 G

Membro di MLA EA per gli schemi di accreditamento SGQ, SGA, PRD, PRS, ISP, GHG, LAB e LAT, di MLA IAF per gli schemi di accreditamento SGQ, SGA, SSI, FSM e PRD e di MRA ILAC per gli schemi di accreditamento LAB, MED, LAT e ISP

For the issuing office:
DNV - Business Assurance
Via Energy Park, 14, - 20871 Vimercate (MB) - Italy

Claudia Baroncini
Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.

ACCREDITED UNIT: DNV Business Assurance Italy S.r.l., Via Energy Park, 14 - 20871 Vimercate (MB) - Italy - TEL: +39 68 99 905. www.dnv.it

In Vitro Diagnostic Medical Device Regulation (IVDR)

The acronym IVDR stands for In Vitro Diagnostic Medical Device Regulation and it entered into force on May 26, 2017 to replace the In Vitro Diagnostic Directive 98/79 / EC (IVDD). EU Regulation 2022/112 has extended the transitional periods for current IVDD products as specifically reported in the article 1.1b which states:

Devices for which the conformity assessment procedure pursuant to directive 98/79 / EC did not require the intervention of a notified body, for which a declaration of conformity was drawn up before 26 May 2022 pursuant to this directive and for which the conformity assessment procedure under this Regulation requires the intervention of a notified body, may be placed on the market or put into service until the following dates:

a) May 26, 2025 for class D devices;
b) May 26, 2026 for class C devices;
c) May 26, 2027 for class B devices;
d) May 26, 2027 for class A devices placed on the market under sterile conditions.

You can find the official document of the EU Regulation 2022/112 here:
https://eur-lex.europa.eu/eli/reg/2022/112/oj

Eureka Lab Division as a manufacturer of class B and C IVD devices undertakes:
– to maintain high quality products and to satisfy all market needs;
– to face the transition to the new requirements set by the IVDR 2017/746 issued by the European Commission in the times and methods established by the EU regulation 2017/746 and by the EU regulation 2022/112

The purpose of the new regulation

The IVDR arises from the need to increase safety and efficiency in the EU medical device market.

Our aim

Eureka Lab Division is committed to producing excellent and highly competitive IVDR compliant products that meet the requirements of the European market to offer ever greater safety to all customers.

Traceability of calibrators

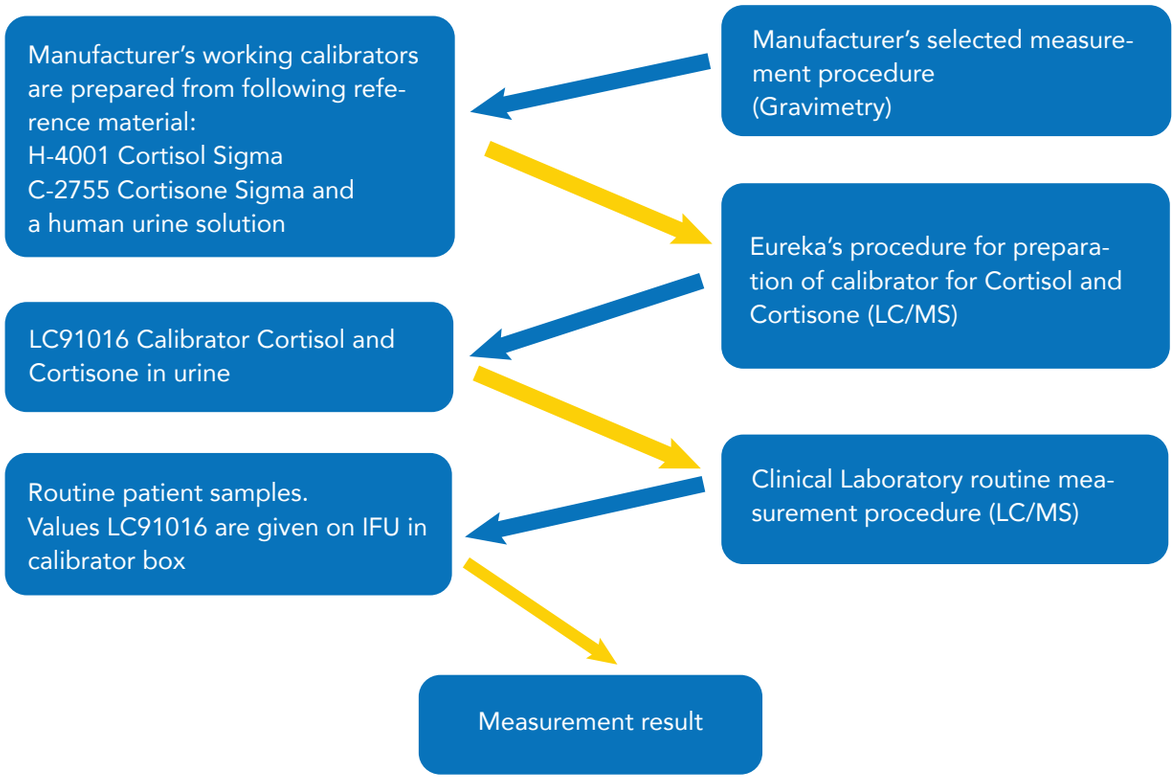
Eureka Lab Division offers the widest range in the market of traceable calibrators for chromatography and mass spectrometric IVD applications. By guaranteeing the traceability of our calibrators we ensure results used for patients' care are accurate, comparable over time and location. Our full compliance with ISO norms is the best guarantee of data reliability for our users. The quality documentation provided upon request complements customers documentation during accreditation.

All our calibrators are linked through our good manufacturing practices (GMP) to reference standards of higher order. Our calibrators are exclusively manufactured from reference standards of the highest order: European Reference Material (ERM), Certified Reference Material (CRM) or the Manufacturer's Certified Reference Standards.

If necessary and upon request, Eureka Lab offers to all its customers additional support material by documenting the traceability chain with internal manufacturing documentation CoA (Certificate of Analysis) that precisely links the calibrator to the reference standard of higher order.

The final proof of the quality of our products is a result of the compulsory participation of Eureka Lab to External Quality Assurance Schemes that we successfully conduct every year. Results of these VEQs can also be supplied to our customers upon request or can be downloaded from our website.

This is an example of the traceability chain for LC91016 Cortisol/Cortisone Calibrator:



Guidelines on transport and storage conditions

Eureka Lab Division assures that all its products are stable during the transportation for at least 2 weeks from the date of shipment.

Upon receipt of the goods, the distributor or the customer must store the product at the temperature that is indicated on the external label. For storage, the receiver must be able to manage 3 different storage temperatures:

from -25°C to -15 °C	Freezer
from +2 °C to +8 °C	Fridge
from +15°C to +25°C	Controlled Temperature

Please, note:

1. Products that need to be stored at -25°C will be shipped in an ice pack for additional precaution. However, even in case the distributor or the customer receives the material with melted ice pack, the integrity and suitability of the material will not be affected for 2 weeks from the date of shipment.

2. Eureka Lab Division declines any responsibility in case the travelling takes more than 2 weeks.

3. Only in the event that the product, received within two weeks from the date of shipment, proves to be non-compliant in practice, Eureka Lab Division is willing to replace the product upon verification of non-compliance.

Table of contents

HPLC Reagents — page 21-66

- Special Clinical Chemistry — page 23-42
- Therapeutic Drug Monitoring (TDM) — page 43-54
- Occupational Toxicology — page 55-64
- Forensic Toxicology — page 65-66

GC and GC/MS Reagents — page 67-90

- Special Clinical Chemistry — page 68-69
- Occupational Toxicology — page 70-80
- Forensic Toxicology — page 81-90

LC/MS Reagents — page 91-126

- Special Clinical Chemistry — page 92-100
- Therapeutic Drug Monitoring (TDM) — page 101-112
- Occupational Toxicology — page 113-114
- Forensic Toxicology — page 115-126

Pro Training Assistance — page 127-129

Alphabetical index — page 130-133

The blue items are accessories and consumable products available separately

Extractive method refers to SPE Extraction

Special clinical chemistry

Here, with the expression "Special Clinical Chemistry", we refer to the analysis of endogenous molecules in body fluids.

Blood and urine are the most commonly tested matrices for the determination and quantification of different compounds, like glucose, lipids, proteins, hormones, enzymes and many others.

For this purpose, several techniques, such as spectrophotometry, immunoassays, and electrophoresis are available (ref. https://www.news-medical.net/life-sciences/Clinical-Chemistry).

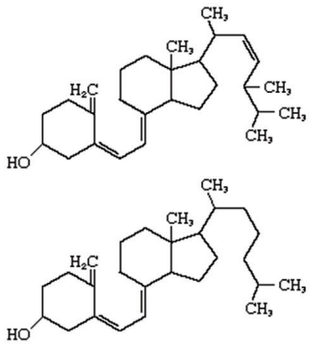
Eureka kits are ready to use kits for use in chromatographic analysis of several matrices such as urine, plasma, serum, whole blood.

Some of the molecules that need to be analyzed are **steroid hormones** because any increase or decrease in their level can be the consequence of impaired functioning of endocrine glands.

We have developed a kit which offers several advantages including a chromatographic run of 8 min and a method that does not require an SPE.

Another important molecule whose plasmatic concentration needs to be monitored is **Vitamin D**. It plays a very important role in the mineralization of bone and in the maintenance of skeletal integrity.

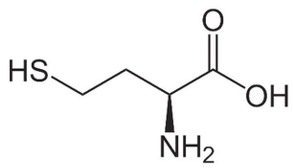
Moreover, patients with cystic fibrosis frequently present vitamin D deficiency. This can be due to pancreatic exocrine insufficiency and to altered metabolism of Vitamin D (Chesdachai and Tangpricha, J Steroid Biochem, Mol Biol, 2016).



(Top) Vitamin D_2; (bottom) Vitamin D_3

taken from https://www.britannica.com/science/vitamin-D

The monitoring of **homocysteine** is also essential because it plays a role in the development of cardiovascular disease (Ganguly and Alam, Nutrition Journal, 2015).



Structure of homocysteine
taken from Ganguly and Alam, Nutrition Journal (2015).

Its name is as a result of it's similarity to cysteine.

According to several studies, homocysteine in plasma in healthy individuals ranges from 5.0 and 15.0 µmol/L or 5.0-12.0 µmol/L if analyzed by HPLC or immunoassays, respectively. The term hyperhomocysteinemia refers to a level of homocysteine in the blood that is over 15.0 µmol/L.

This abnormality can be due to genetic mutations of the enzymes implicated in homocysteine metabolism or to environmental factors.

Hyperhomocysteinemia occurs in patients with chronic renal impairment or with atherothrombotic vascular disease (taken from Ganguly and Alam, Nutrition Journal (2015).

Eureka kits represent a valid tool to analyze and quantify endogenous molecules with accuracy, reproducibility, specificity and with a short run of the chromatographic method.

Therapeutic Drug Monitoring

Pharmacological treatments and their side effects can have an impact on the patients' safety or quality of life. Specifically, the so called ADME (absorption, distribution, metabolism, and excretion) of the drug can be highly influenced by genetics, environment and administration of other drugs due to co-morbidities. Therefore, in some cases the treatment with a fixed drug dose can be hazardous to patients' health. For this reason, the management of a drug therapy which is optimized for a specific case is necessary.

In some cases, this can be needed for drugs that present a narrow therapeutic range, which can be easily exceeded causing toxic effects and/or increasing drug-drug interactions (DDIs) (Tuzimski and Petruczynik, Molecules, 2020). Alternatively, if the drug concentration is lower than the safety range, the pharmacological activity required might not occur.

In the light of this, Therapeutic Drug Management (TDM) is a strategic way to "adjust" the treatment and the dose based on patient's clinical case (Kuhlin *et al.* Clinical Mass Spectrometry, 2019). In clinical practice, several matrices can be used for TDM: whole blood, serum, plasma, dried blood spots, oral fluid. In serum, binding between protein and drug can occur so that only a smaller quantity remains unbound and, consequently, it is responsible for the therapeutic effect. Nevertheless, for particular patients it may be necessary to monitor the total drug concentration (Tuzimski and Petruczynik, Molecules, 2020).

Mainly, drug metabolism take place at the hepatic level, thorough Cytochrome P-450 (CYP450) (Patel, *et al.* The Journal of Clinical Pharmacology, 2016).

Upon metabolism the drugs are usually inactivated. However, in some cases they give rise to drug metabolites which are responsible of pharmacological activity (active metabolites). Such effects can be even higher than the one of the parent drug. Many drugs or substances might enhance or reduce the enzymatic activity of CYP450 leading to DDIs that may result in higher toxicity or lower pharmacological activity of one of the drugs (Ref. Drug Metabolism By Jennifer Le, https://www.msdmanuals.com).

DDIs might also reduce the formation of pharmacologically active metabolites (Mannheimer and Eliasson, Journal of Internal Medicine, 2010).

Here are some clinical scenarios of when TDM is required:

- Appearance of toxic effects
- Co-administration of drugs
- Hephatic and renal impairments
- Changes in metabolism
- Active metabolites
- Drugs with narrow therapeutic index
- Organ transplant
- Monitoring of the adherence

(Tuzimski and Petruczynik, Molecules, 2020)

Liquid chromatography coupled with tandem mass spectrometry (LC-MS/MS) techniques allows analysis of drugs with high selectivity and sensitivity.

For a long time, immunoassays have been used in TDM. However, the necessity to analyze specific metabolites and to avoid non-specific interference coming from other molecules or matrix led to a switch to an alternative method which provides high selectivity and sensitivity, high-quality data and reproducibility. This has been found in liquid chromatography methods coupled with UV, fluorescence detection (FLD) or MS detectors triple quad.

In order to ensure accurate drug measurement and to avoid unspecific interference, the establishment of a detection method is important (Tuzimski and Petruczynik, Molecules, 2020).

Eureka kits represents a valid tool for TDM.

Their advantages are:

- Ready to use and CE/IVD kit
- Simple, non-critical and rapid preparative phase
- Maximum specificity
- Recovery of analytes from 90% to 100% (HPLC, GC, GS/MS) and near to 100% (LC/MS)

Occupational toxicology

Occupational toxicology represents a discipline among medical specialties that aims to analyze, diagnose and prevent diseases due to chemical and biological hazards in the work environment. These include pollution, carcinogenesis, biological factors, ergonomics, etc (Groneberg and Axel Fischer, Journal of Occupational Medicine and Toxicology, 2006).

Here are some examples:

It has been seen that benzene causes bone marrow damage and cancer following long exposure to high concentration **(Ref: IARC:chemical)**.

Benzene is metabolized at the hepatic level via CYP P450 leading to the formation of benzene oxide, from which other metabolites are formed.

Actually, two minor metabolites such as S-phenyl mercapturic acid and trans, trans-Muconic acid will be present in urine.

These need to be monitored in the working environment since they are considered valid biomarkers of benzene exposure due to their specificity (Sedha, Sapna & Doctor, Pankaj, 2017)

Eureka offers a solution to this issue by proposing specific kits: the trans, trans-Muconic Acid and S-phenyl mercapturic acid in urine by LC/MS (new kit).

Another biological indicator of hazardous occupational exposure is methanol in urine as it can be extremely toxic. Therefore, its monitoring is necessary in order to determine whether any antidotal therapy is needed (Ashurst and Nappe, 2020).

In order to meet this need, Eureka developed a specific kit: Methanol in urine by UV-FAST which allows a very short and simple chromatographic run.

In this section many kits, which are very useful in occupational toxicology, are listed.

Forensic Toxicology

The term "Toxicology", also known as the "Science of Safety", refers to the scientific field that investigates the damaging effects that chemicals, drugs, others substances or various settings can have on the environment, individuals and animals (Ref. https://www.niehs.nih.gov).
Among the several branches that Toxicology is divided into, here we focus on **Forensic Toxicology**.

Forensic toxicology analyzes toxic substances and their adverse effects in human or animals with medical-legal implications (https://sciencemonk.com/forensic-toxicology/).
The toxicological analyses in the forensic field involve the examination of the so-called "conventional" matrices (whole blood, urine) and "alternatives" such as the hair oral fluid and sweat.
Their respective outcome, alone or in combination, provide useful elements for a correct diagnosis with forensic/medico-legal meaning in various fields.

Examples of frequent observations are reported below:

- Urine is the election matrix for determining the "recent" consumption of substances of abuse. It is unacceptable to use the urinary matrix to diagnose the biological effect produced by a substance of abuse for toxicological and forensic and medical-legal purposes (for example a state of psycho-physical alteration from the use of drugs).

- Hair matrix can be investigated to verify the status of a chronic user, as well as previous behaviors of use/abuse. The segmental analysis of hair helps to reconstruct the chronology of the consumption fairly accurately. Considering the overall hair replacement time in a sufficiently extended body area, a "time window" of about 9-18 months can be evaluated in relation to the type of hair and its natural growth.

- Whole blood matrix has been regulated and it is the election matrix to investigate the "current" use of substances of abuse. However, it is an invasive procedure and it can lead to risks for both the patient and the operator.

- Saliva matrix (more properly oral fluid) represents an alternative to whole blood, but not yet regulated. As well as whole blood matrix, it can be used to check the "current" use of substances of abuse. Moreover, it has the advantage to be a non-invasive collection method.

Mass spectrometry coupled to a chromatographic method is an election identification technique for confirmation analysis.

The use of a screening method is justified in a Forensic Toxicology Laboratory when there is need to analyze a large number of samples quickly and at low cost, with the advantages of high or total automation. Screening methods usually employ colorimetric, enzymatic and immunochemical techniques. The screening methods are however characterized by reduced specificity (qualitative data) and high inaccuracy (quantitative data) in particular when there are more chemical species in the sample that can be detected but not discriminated by the method (such as unchanged compound and its metabolites, various types of similar species of compounds).

A positive result obtained through a single screening test cannot have "forensic" validity. It is therefore necessary that this result is checked by a confirmation analysis of a new sample aliquot. The confirmation method must be able to produce an analytical result as independent as possible from the screening result and it must be characterized by **SELECTIVITY** and **SENSITIVITY** superior so that of screening.

In the field of forensic toxicology, the use of mass spectrometry (MS) in its many methodological possibilities, in combination with a chromatographic separation technique (gas chromatography, GC; high-pressure liquid chromatography, HPLC or electrophoretic capillary electrophoresis, EC) for Confirmation Analysis meet the general consensus of the international scientific community.

Eureka kits belonging to the Forensic Toxicology family are used to confirm and quantify the drugs of abuse in urine, hair, whole blood and saliva.
They are "Second Level Confirmation Tests" and must be compulsorily analyzed in GC- GC/MS or LC/MS as described in this catalogue.

Thanks to their use, clinical and forensic laboratories do not need to prepare several reagents frequently. In particular, Eureka kits:

- Avoid possible sources of error
- Reduce the working time
- Avoid managing several suppliers of raw material and accessories
- Provide accurate and reproducible results
- Assure standardized and simple preparations

New Kits 2022

Special Clinical Chemistry

LC91210
Steroid hormones in urine by LC-MS/MS

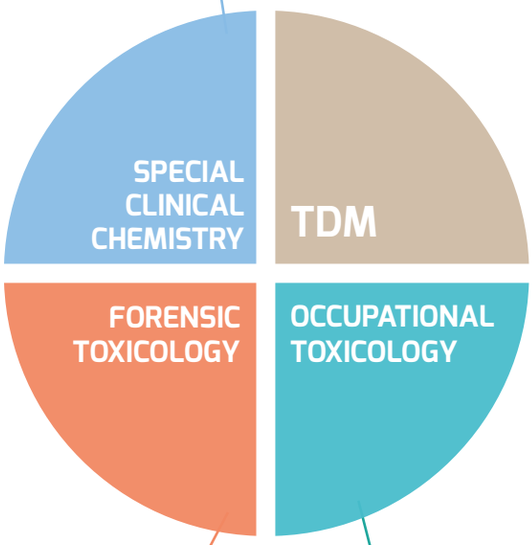
LC91110
Cortisol and cortisone in saliva by LC-MS/MS

LC21110
Trimethylamine n-oxide (tmao) in plasma by LC-MS/MS

Z85710
Vitamin B1/B6 in whole blood by fluorimetry - FAST

NEW

The new Kits are marked with a red rectangle and the word "NEW"



Forensic Toxicology

LC80310
Benzodiazepines and barbiturates in urine by LC-MS/MS

GC88810
Oleolites (phytocannabinoids) for therapeutic use by GC/MS

Occupational Toxicology

GC77110
Volatile organic compounds (VOC) in whole blood by GC/MS HEAD SPACE

GC99010
N-Methylacetamide and n-methylformamide in urine by GC/MS

GC30010
Acetates in urine by GC/MS HEAD SPACE

Unique Kits 2022

Special Clinical Chemistry

Z10650
DUAL Kit Catecholamines by Fluorimetry – FAST

Z32310
Citrates in serum by UV

Z32410
Citrates in serum and in urine by UV - Dual kit

Z58010
ADMA in serum and by Fluorimetry

Z61010
3-Nitrotyrosine by UV FAST

LC97010
Catecholamines/Metanephrines by LC/MS (Unique kit that analyzes catecholamines and metanephrines in one run)

LC91210
Steroid Hormones in urine by LC-MS/MS

LC21110
TMAO in plasma by LC-MS/MS

TDM

Z88110
Metformin in serum by UV/VIS-FAST

LC75310
Immunosuppressants DUAL KIT in whole blood/plasma by LC-MS/MS (Unique as dual kit)

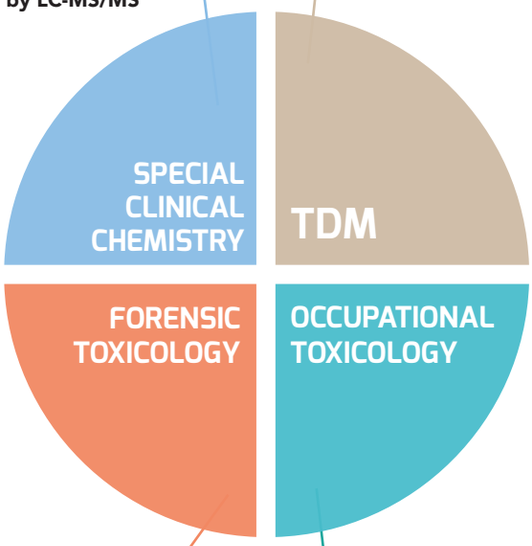
LC79110
Antituberculosis Drugs in plasma by LC-MS/MS

LC92010
Tamoxifen, Endoxifen in plasma by LC-MS/MS

LC94010
Irinotecan and 7-Ethyl-10-Hydroxycamptothecin (SN38) in serum and in plasma by LC-MS/MS

LC99010
Ponatinib in plasma by LC-MS/MS

LC85010
Degradation rate of 5-fluorouracil in Peripheral Blood Mononuclear Cell (PBMC) (ex-vivo) by LC-MS/MS



UNIQUE

The unique kits are marked with a fingerprint on a yellow background

Forensic Toxicology

LC49010
Drugs of Abuse in hair by LC-MS/MS

LC53010
Δ-9-THC and Δ-9 THC-COOH in hair by LC-MS/MS

LC98010
Drugs of Abuse in saliva by LC-MS/MS

LC20000
Identification of illicit substances on unknown samples by LC-MS/MS

LC88810
Oleolites (Phytocannabinoids for therapeutic use) by LC-MS/MS

SC9000
Fast Toxicological Screening kit in urine, plasma and whole blood by LC/MS

SC9000B
Fast Toxicological Screening kit in plasma and whole blood by LC/MS

SC1000
Fast screening kit of 1st level for tabelled Drugs of Abuse in urine/hair/whole blood by LC-MS/MS

Occupational Toxicology

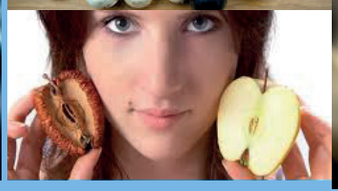
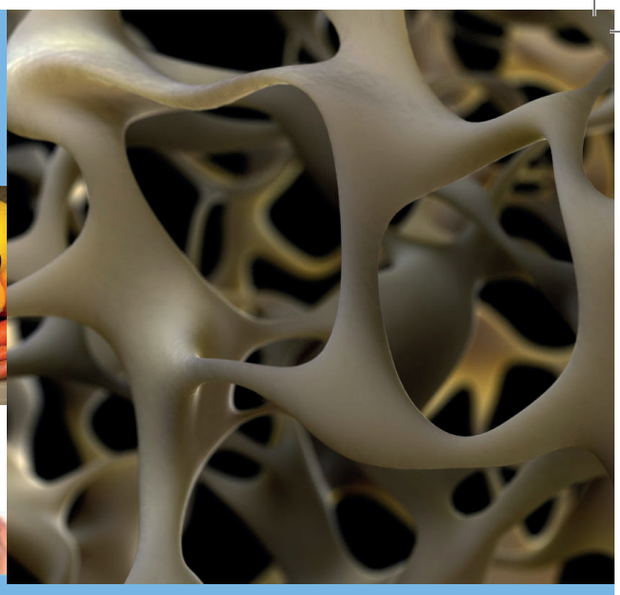
Z45610
Methanol in urine by UV-FAST

Z39110
Free Eritrocitary Protoporphyrin IX (PPIX) and Zinc Protoporphyrin (ZnPP) in whole blood by Fluorimetry- FAST

LC23010
t,t Muconic acid and S-Phenylmercapturic acid in urine by LC-MS/MS (unique by LC-MS/MS)

Please, note: all the GC and GC-MS kits are Eureka Unique.

HPLC

SPECIAL CLINICAL CHEMISTRY

N°	Code	HPLC	Packaging

BONE RE-ABSORPTION MARKERS

INSIGHTS

Hydroxyproline is contained almost exclusively in collagen, where it accounts for 14% of the total aminoacid composition and comes from hydroxylation of proline. Collagen, the principal component of bones, is a protein whose primary structure is made by a repetitive sequence of glycine, proline, hydroxyproline and hydroxylysine. Since half of the total collagen is in the bone matter, a bone reabsorption causes an impoverishment in collagen and presents itself with a higher concentration of hydroxylysine proportional to the amount of destructed collagen. Urinary hydroxyproline is an important marker of bone resorption. Its urinary excretion is an index of the rate of bone resorption.

1	**Z01610**	**Hydroxyproline in urine by UV/VIS - FAST**	**1 x 100 tests**
	Z01611	Hydroxyproline in urine - FAST - Mobile Phase	4 x 500 ml
	Z01016	Calibrator for Hydroxyproline in urine	4 x 5 ml
	Z10559	Control for Biogenic Amines in urine - Levels 1 and 2 (Dopamine, Epinephrine, Hydroxyproline, 5-HIAA, HVA, Norepinephrine, Normetanephrine, Metanephrine, 3-Methoxytyramine, VMA)	2 x 5 x 5 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
2	**Z12610**	**Hydroxyproline in urine by Fluorimetry - FAST**	**1 x 100 tests**
	Z12611	Hydroxyproline in urine - FAST - Mobile Phase	4 x 500 ml
	Z01016	Calibrator for Hydroxyproline in urine	4 x 5 ml
	Z10559	Control for Biogenic Amines in urine - Levels 1 and 2 (Dopamine, Epinephrine, Hydroxyproline, 5-HIAA, HVA, Norepinephrine, Normetanephrine, Metanephrine, 3-Methoxytyramine, VMA)	2 x 5 x 5 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs

INSIGHTS

Pyridinoline (Pyr) and deoxy-pyridinoline (D-Pyr) are two crosslinks of maturated collagen present in many connective tissues such as bones, cartilages, tendons, ligaments and the Aorta, however absent in collagen and epidermis. Both compounds are expelled with urine. These compounds derive exclusively from maturated collagen degradation and the expulsion does not seem to be influenced by diet. For all these reasons the dosage of urinary concentrations of Pyr and D-Pyr was proposed for the evaluation of bone re-absorption and pathologies that are linked to this phenomenon like osteoporosis, primary hyperparathyroidism and Paget syndrome, and for follow up of bones tumor metastasis.

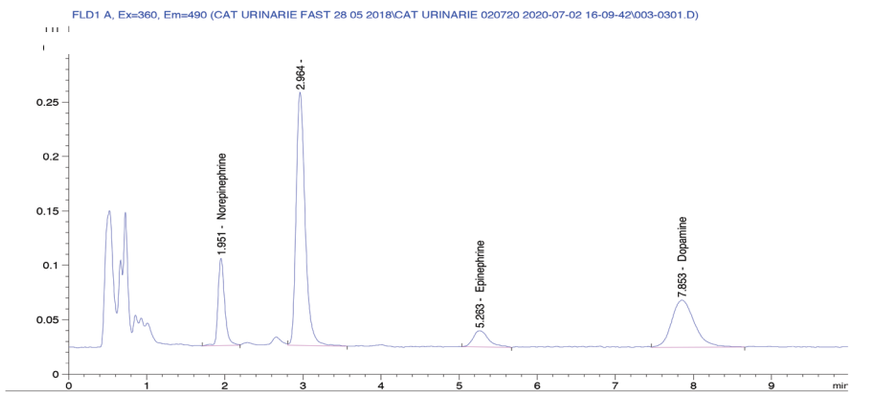
3	**Z29610**	**Pyridinium Cross-Links in urine by Fluorimetry - FAST (Extractive Method)**	**1 x 100 tests**
	Z29611	Pyrydinium Cross-Links in urine - FAST - Mobile Phase	4 x 500 ml
	Z29016	Calibrator for Pyridinium Cross-Links in urine	4 x 5 ml
	Z29019	Control for Pyridinium Cross-Links in urine - Levels 1 and 2	2 x 5 x 5 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injectionss (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs

N°	Code	HPLC	Packaging
		TUMOR MARKERS	

INSIGHTS

Catecholamines are used as markers when there is the suspicion of a pheochromocytoma or paraganglioma or neuroblastoma. They can also be requested when the pheochromocytoma has already been surgically removed and you want to monitor the fallout. The blood test is more useful when the patient is affected by persistent hypertension or such episodes; this is because the hormones do not remain in the circulatory system long enough, but they are utilized, metabolized and expelled. The exam on the urinary matrix measures the quantity of catecholamines released in 24 hours. Since the hormonal concentrations vary over the day, the examination of the urine sample can determine an excessive production that would be overlooked on a plasmatic matrix.

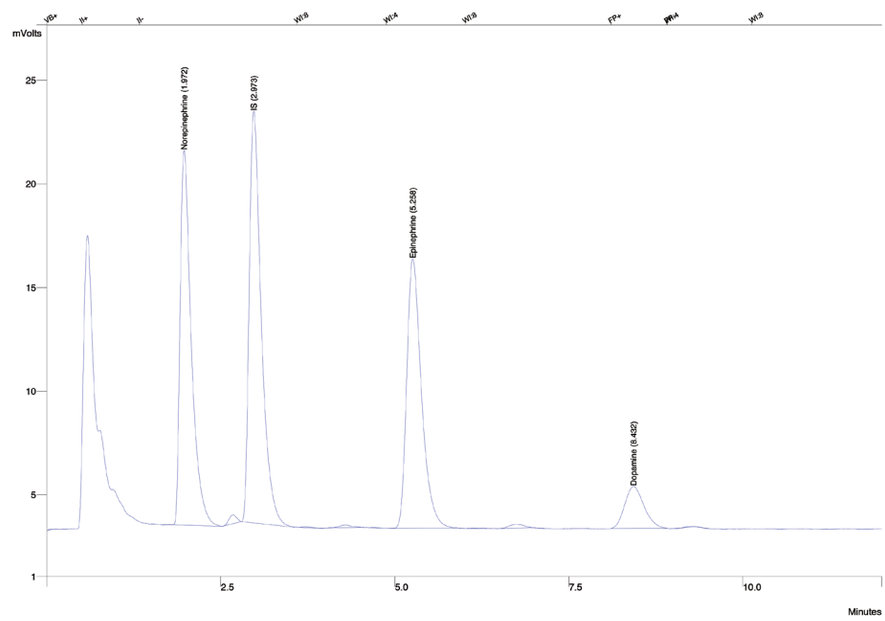
4	**Z10710**	**Free Catecholamines in urine with resin by Fluorimetry - FAST** (Dopamine, Epinephrine, Norepinephrine)	**1 x 100 tests**
	Z10711	Free Catecholamines in urine - FAST - Mobile Phase	4 x 500 ml
	Z10116	Calibrator for Catecholamines in urine (Dopamine, Epinephrine, Norepinephrine)	4 x 5 ml
	Z10559	Control for Biogenic Amines in urine - Levels 1 and 2 (Dopamine, Epinephrine, Hydroxyproline, 5-HIAA, HVA, Norepinephrine, Normetanephrine, Metanephrine, 3-Methoxytyramine, VMA)	2 x 5 x 5 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs



Urine control (level 1)	
RT (min)	**Analyte**
2.0	*Norepinephrine*
3.0	*IS*
5.3	*Epinephrine*
7.9	*Dopamine*

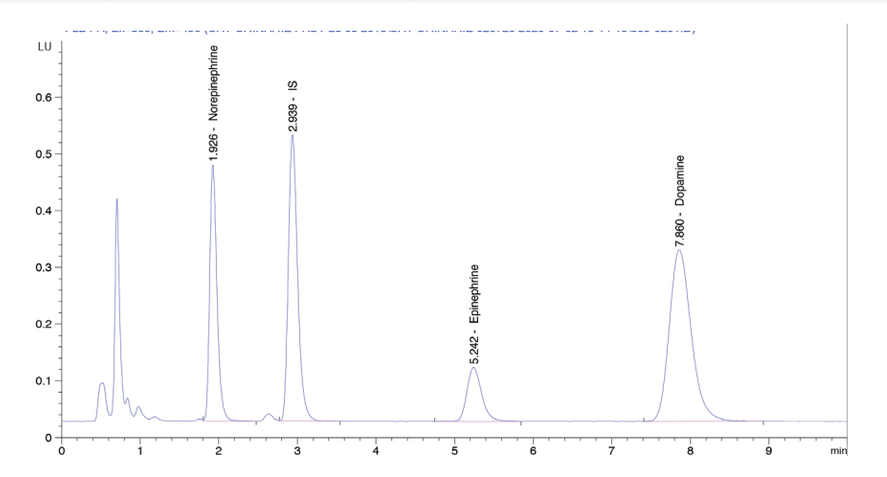
5	**Z10610**	**Free Catecholamines in urine by Fluorimetry - FAST (Extractive Method)** (Dopamine, Epinephrine, Norepinephrine)	**1 x 100 tests**
	Z10611	Free Catecholamines in urine - FAST - Mobile Phase	4 x 500 ml
	Z10116	Calibrator for Catecholamines in urine (Dopamine, Epinephrine, Norepinephrine)	4 x 5 ml
	Z10559	Control for Biogenic Amines in urine - Levels 1 and 2 (Dopamine, Epinephrine, Hydroxyproline, 5-HIAA, HVA, Norepinephrine, Normetanephrine, Metanephrine, 3-Methoxytyramine, VMA)	2 x 5 x 5 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs

N°	Code	HPLC	Packaging
6	**Z25610**	**Free Catecholamines in plasma by Fluorimetry - FAST (Extractive Method)** (Dopamine, Epinephrine, Norepinephrine)	**1 x 100 tests**
	Z25611	Free Catecholamines in plasma - FAST - Mobile Phase	4 x 500 ml
	Z25016	Calibrator for Catecholamines (Dopamine, Epinephrine, Norepinephrine) in plasma	4 x 1 ml
	Z25019	Control for Catecholamines (Dopamine, Epinephrine, Norepinephrine) in plasma - Levels 1 and 2	2 x 5 x 1 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs



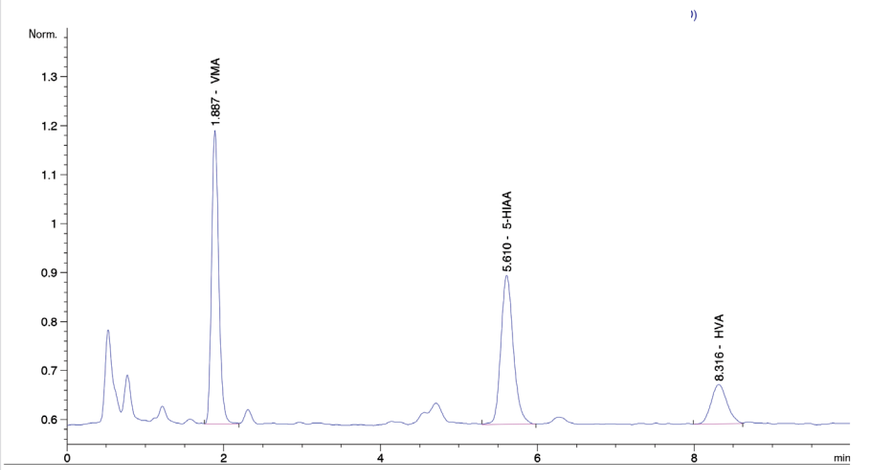
Plasma control (level 2)	
RT (min)	**Analyte**
2.0	*Norepinephrine*
3.0	*IS*
5.3	*Epinephrine*
8.4	*Dopamine*

N°	Code	HPLC	Packaging
	UNIQUE		
7	Z10650	**DUAL Kit Catecholamines by Fluorimetry - FAST (Extractive Method)** (Dopamine, Epinephrine, Norepinephrine)	**1 x 100 tests**
		(Kit for analysis of Free Catecholamines in Plasma and in Urine)	
	Z10651	DUAL Kit Catecholamines - FAST - Mobile Phase	4 x 500 ml
	Z10116	Calibrator for Catecholamines in urine (Dopamine, Epinephrine, Norepinephrine)	4 x 5 ml
	Z25016	Calibrator for Catecholamines in plasma (Dopamine, Epinephrine, Norepinephrine)	4 x 1 ml
	Z10559	Control for Biogenic Amines in urine - Levels 1 and 2 (Dopamine, Epinephrine, Hydroxyproline, 5-HIAA, HVA, Norepinephrine, Normetanephrine, Metanephrine, 3-Methoxytyramine, VMA)	2 x 5 x 5 ml
	Z25019	Control for Catecholamines in plasma - Levels 1 and 2 (Dopamine, Epinephrine, Norepinephrine)	2 x 5 x 1 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs



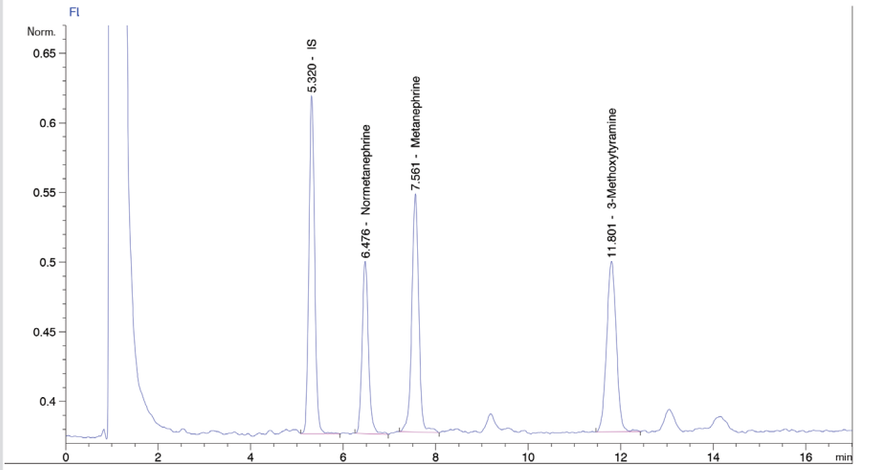
Urine calibrator	
RT (min)	**Analyte**
1.9	*Norepinephrine*
2.9	*IS*
5.2	*Epinephrine*
7.9	*Dopamine*

N°	Code	HPLC	Packaging
		INSIGHTS The catabolic process of monoamines is in part neuronal and happens in the mitochondria and it is catalyzed by the Monoamine oxidase (MAO) and, partly extra neuronal for catecholamines, it is catalyzed by COMT. In particular, we obtain dihydroxyphenylacetic acid from dopamine by the action of the MAO, which is transformed by COMT into Homovanillic Acid (HVA). 3,4-Dihydroxypropanoic originates from Noradrenaline and Adrenaline and by interacting with COMT we have the synthesis of Vanilmandelic acid (VMA). Values of these analytes out of the norm indicate the presence of Pheochromocytoma, paraganglioma or neuroblastoma. 5-hydroxyindolacetic acid (5-HIIA) is the principal final product of serotonin metabolism. The determination of its concentration in urine is utilized for the diagnosis of a neuroendocrine tumor.	
8	**Z14610**	**Free VMA/5-HIAA/HVA in urine by Fluorimetry - FAST** (5-hydroxyindolacetic acid, Homovanillic Acid, Vanilmandelic acid) Attention: it's necessary to have a column heater at min 21 °C!	**1 x 100 tests**
	Z14611	Free VMA/5-HIAA/HVA in urine - FAST - Mobile Phase	4 x 500 ml
	Z14516	Calibrator for VMA, 5-HIAA and HVA in urine	4 x 5 ml
	Z10559	Control for Biogenic Amines in urine - Levels 1 and 2 (Dopamine, Epinephrine, Hydroxyproline, 5-HIAA, HVA, Norepinephrine, Normetanephrine, Metanephrine, 3-Methoxytyramine, VMA)	2 x 5 x 5 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs



Urine control (level 2)	
RT (min)	**Analyte**
1.9	*Vanilmandelic acid (VMA)*
5.6	*5-hydroxyindolacetic acid (5-HIAA)*
8.3	*Homovanillic acid (HVA)*

N°	Code	HPLC	Packaging
		INSIGHTS The dosage of urinary metanephrines represents a reliable test for the screening of pheochromocytoma. These substances derive from the metabolism of catecholamines, hormones produced and secreted by medullary of the adrenal glands, in order to prepare the organism for stressful events. Pheochromocytoma is a tumor that affects adrenalin glands causing a hypersecretion of catecholamines; as a result, levels of Adrenaline and Noradrenaline increase, as do the respective metabolites, called metanephrines. They form inside the tumor and are secreted inconsistently by the tumor.	
9	Z13210	**Total Metanephrines in urine by Fluorimetry-FAST (Extractive Method)** (3-Methoxytyramine, Metanephrine, Normetanephrine)	**1 x 100 tests**
	Z13211	Total Metanephrines in urine - FAST - Mobile Phase	4 x 500 ml
	Z12516	Calibrator for Total Metanephrines in urine (3-Methoxytyramine, Metanephrine, Normetanephrine)	4 x 5 ml
	Z10559	Control for Biogenic Amines in urine - Levels 1 and 2 (Dopamine, Epinephrine, Hydroxyproline, 5-HIAA, HVA, Norepinephrine, Normetanephrine, Metanephrine, 3-Methoxytyramine, VMA)	2 x 5 x 5 ml
	Z695975408	Infinity Lab Poroshell 120 PFP Analytical column ~ 1000 injections (100 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs



Urine calibrator	
RT (min)	**Analyte**
5.3	*IS*
6.5	*Normetanephrine*
7.6	*Metanephrine*
11.8	*3-Methoxytyramine*

INSIGHTS

Serotonin is an ammine with important biological effects; it stimulates straight muscle contraction of the gastroenteral, bronchus, bladder and vascular system, besides being involved in the cerebral functioning and hemostasis. An elevated quantity of serotonin in circulation is caused by a series of alterations to functional mechanisms and anatomical alterations, which, together, form the whole picture of the carcinoma syndrome: intestinal circulatory disturbance, sense of warmth, tachycardia, asthmatic phenomena, and migraines.

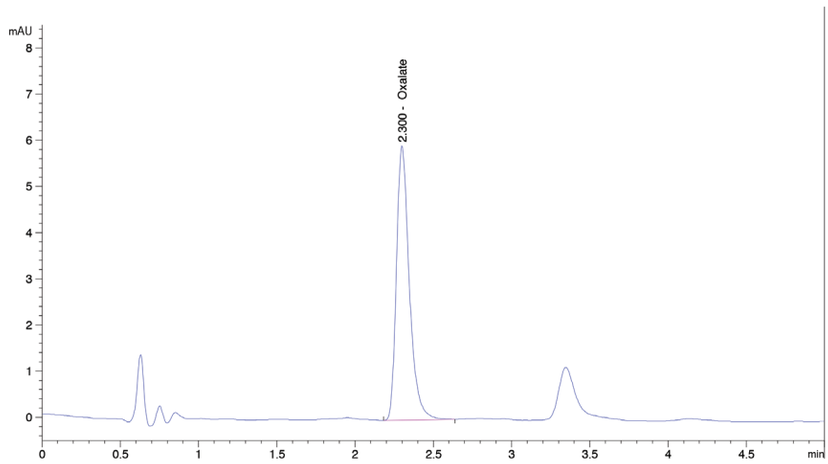
10	Z15610	**Serotonin in urine by Fluorimetry - FAST (Extractive Method)**	**1 x 100 tests**
	Z15611	Serotonin in urine - FAST - Mobile Phase	4 x 500 ml
	Z15516	Calibrator for Serotonin in urine	4 x 5 ml
	Z15519	Control for Serotonin in urine - Levels 1 and 2	2 x 5 x 5 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs

N°	Code	HPLC	Packaging
11	**Z15110**	**Serotonin in serum by Fluorimetry - FAST**	**1 x 100 tests**
	Z15111	Serotonin in serum - FAST - Mobile Phase	4 x 500 ml
	Z15016	Calibrator for Serotonin in serum	4 x 2 ml
	Z15019	Control for Serotonin in serum - Levels 1 and 2	2 x 5 x 2 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
		INDICATOR FOR KIDNEY STONES DEVELOPEMENT	

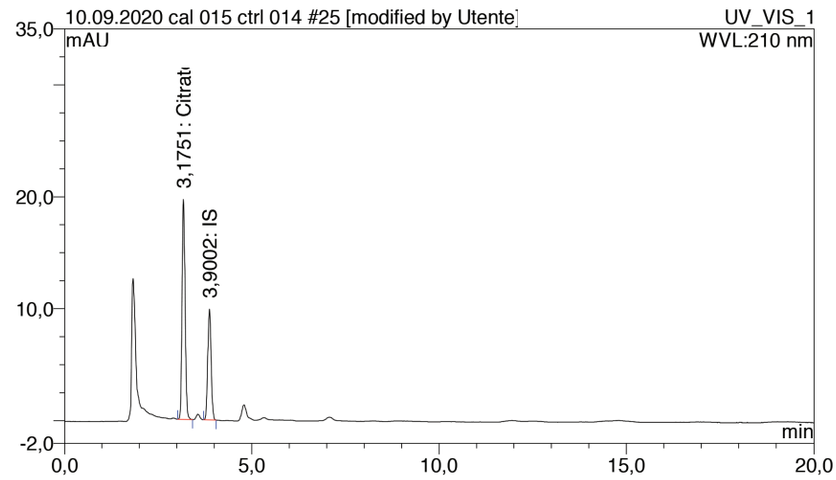
INSIGHTS

The oxalates introduced by diet are eliminated for the major part by urinating. If the diet presents an elevated quantity of calcium, the quantity of oxalate absorbed by the intestine tends to diminish because the oxalate is precipitated as calcium oxalate; this is therefore characteristic in subjects with an oxalate rich diet and low in calcium, like a vegetarian diet, which favors the formation of calcium oxalate kidney stones.

12	**Z32610**	**Oxalate in urine by UV and by Fluorimetry - FAST**	**1 x 100 tests**
	Z32611	Oxalate in urine - FAST - Mobile Phase	4 x 500 ml
	Z32216	Calibrator for Oxalate/Citrates in urine	4 x 5 ml
	Z32219	Control for Oxalate/Citrates in urine - Levels 1 and 2	2 x 5 x 5 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs

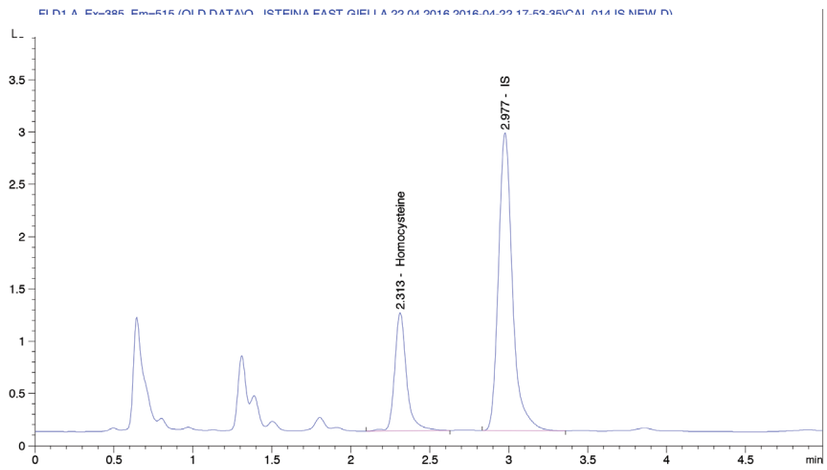


Urine sample	
RT (min)	**Analyte**
2.3	*Oxalate*

N°	Code	HPLC	Packaging
		INSIGHTS The diminishing of Citrates in urine compared to normal values indicates the presence of kidney stones. Significant differences were found in citraturia by gender and diet. In fact, increased excretion is seen in females because of the higher rate of estrogen (this would explain the lower incidence of gallstones in women of childbearing age), a diet with excess protein, sodium chloride or prolonged fasting. With this method you can determine the concentration of citric acid in urine.	
13	**Z32510**	**Citrates in urine by UV - FAST** Attention: it's necessary to have a column heater at min 55°C!	**1 x 100 tests**
	Z32511	Citrates in urine - FAST- Mobile Phase	4 x 500 ml
	Z32216	Calibrator for Oxalate/Citrates in urine	4 x 5 ml
	Z32219	Control for Oxalate/Citrates in urine - Levels 1 and 2	2 x 5 x 5 ml
	ZTF25303154630	Hypersil Gold AQ Analytical Column ~ 1000 injections (150 x 4,6 mm - 3 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
			
	UNIQUE		
14	**Z32310**	**Citrates in serum by UV** Attention: it's necessary to have a column heater at min 55°C !	**1 x 100 tests**
	Z32311	Citrates in serum - Mobile Phase	4 x 500 ml
	Z32320	Liquid Calibrator for Citrate in serum	2 x 5 ml
	ZPL11706830	Hi Plex H Analytical column ~ 1000 injections (300 x 7,7 mm - 8 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	UNIQUE		
15	**Z32410**	**Citrates in serum and in urine - Dual kit by UV** Attention: it's necessary to have a column heater at min 55°C !	**1 x 100 tests**
	Z32411	Citrates in serum and urine Dual kit - Mobile Phase	4 x 500 ml
	Z32320	Liquid Calibrator for Citrate in serum	2 x 5 ml
	Z32216	Calibrator for Oxalate/Citrates in urine	4 x 5 ml
	Z32219	Control for Oxalate/Citrates in urine - Levels 1 and 2	2 x 5 x 5 ml
	ZPL11706830	Hi Plex H Analytical column ~ 1000 injections (300 x 7,7 mm - 8 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs

Urine calibrator	
RT (min)	**Analyte**
3.2	*Citrates*
3.9	*IS*

N°	Code	HPLC	Packaging
		ANTIOXIDANT MOLECULES	
	UNIQUE	INSIGHTS The asymmetric dimethyl arginine (ADMA), inhibits the production of nitrous oxide, hindering the normal vascular homeostasis. Elevated ADMA levels were observed in cerebrovascular events, in arteriosclerosis, in hypertension, in hyperlipidemia, in diabetes and kidney insufficiency.	
16	**Z58010**	**ADMA in serum and in plasma by Fluorimetry** (Asymmetric Dimethylarginine, Symmetric Dimethylarginine, Total Arginine)	**1 x 100 tests**
	Z58011	ADMA in serum and in plasma - Mobile Phase	4 x 500 ml
	Z58016	Calibrator for ADMA, SDMA and Arginine in plasma	4 x 5 ml
	Z58019	Control for ADMA, SDMA and Arginine in plasma - Levels 1 and 2	2 x 5 x 5 ml
	ZPSS830815	Phenyl Spherisorb Analytical column ~ 1000 injections (250 x 4,6 mm - 5 µm)	1 Pc
	ZPSS830008	In Line Guard Cart Holder Kit	1 Pc
	ZPSS830078	Phenilic Prefilters Spher 5 µ P 4,6 mm x 1 cm Guard	1 x 3 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
		INSIGHTS Homocysteine is considered an independent risk factor, because it is able to increase the incidence of cardiovascular diseases independently of the presence of other causing factors. Values over 10-12 micromoles per liter are correlated to an augmented risk of arteriosclerosis, ictus and myocardial infarction. Like cholesterol, homocysteine is associated with an increased risk of cardiovascular diseases. However it also increases the risk of other pathologies (venous thrombosis, pulmonary embolism) as well as fetal malformations, mental decay, Alzheimer and spontaneous fractures.	
17	**Z09610**	**Homocysteine in plasma by Fluorimetry - FAST**	**1 x 100 tests**
18	**Z09710**	**Homocysteine in plasma by Fluorimetry - FAST**	**1 x 500 tests**
	Z09611	Homocysteine in plasma - FAST - Mobile Phase	4 x 500 ml
	Z09016	Calibrator for Homocysteine in plasma	4 x 2 ml
	Z09019	Control for Homocysteine in plasma - Levels 1 and 2	2 x 5 x 2 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs



Plasma calibrator	
RT (min)	**Analyte**
2.3	*Homocysteine*
3.0	*IS*

N°	Code	HPLC	Packaging

INSIGHTS

Reduced Glutathione (GSH) participates, through various biochemical mechanisms in the metabolism of various endogenous compounds. In some cases it works as a coenzyme, in others as a substrate. It intervenes in the transport of aminoacids and probably also in the transport of certain amino and peptide groups. In particular some studies have confirmed the importance of glutathione in the protection of cell membranes and constitutive proteins through the manteinance of the –SH groups. GSH is a powerful antioxidant useful for monitoring the defense of cells against free radicals.

19	**Z30110**	**Glutathione in whole Blood by Fluorimetry FAST**	**1 x 100 tests**
	Z30111	Glutathione in whole Blood by Fluorimetry FAST - Mobile Phase	4 x 500 ml
	Z30016	Calibrator for Glutathione in whole blood	4 x 1 ml
	Z30019	Control for Glutathione in whole blood – Levels 1 and 2	2 x 5 x 1 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs

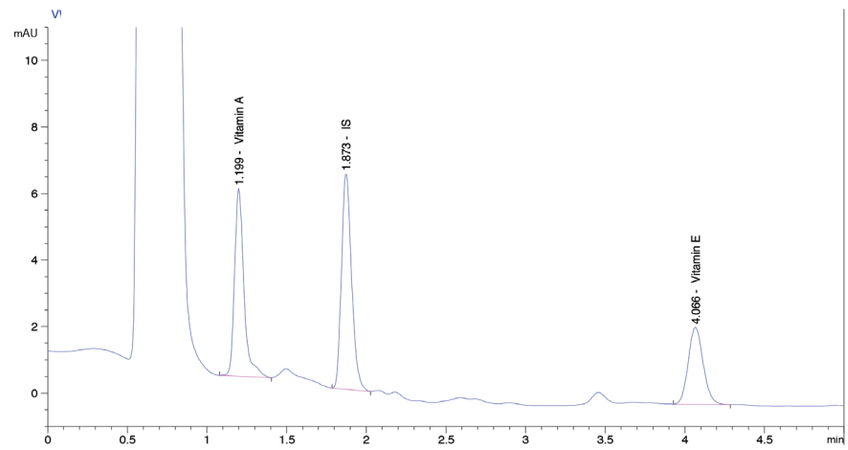
INSIGHTS

Coenzyme Q, also called Ubiquinone (or vitamin Q) is an organic molecule with a very long isoprene lateral chain, similar to vitamin K and E. In organisms it participates to redox reactions and, depending on the oxidation state, could be present in three forms: oxidized, a semi-quinone form and a reduced form. Increased levels of Q10 could improve the efficiency of the electron transport chain, increasing the available energy. Concentration of Q10 tends to diminish with old age. Low levels are registered in the presence of particular chronic diseases such as cardiac problems, Parkinson disease, muscular dystrophy, diabetes, cancer and AIDS. Also some drugs, like statins used in the control of hypercholesterolemia can lower Q10 levels.

20	**Z63110**	**Coenzyme Q10 in plasma by UV - FAST** it's better to have a dry system!	**1 x 100 tests**
	Z63111	Coenzyme Q10 in plasma - FAST - Mobile Phase	4 x 500 ml
	Z63016	Calibrator for Coenzyme Q10 in plasma	4 x 1 ml
	Z63019	Control for Coenzyme Q10 in plasma - Levels 1 and 2	2 x 5 x 1 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs

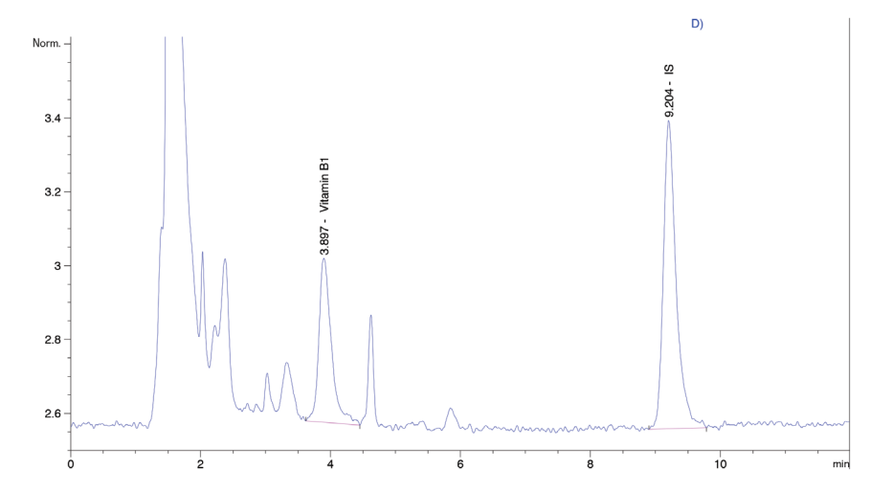
N°	Code	HPLC	Packaging
		INSIGHTS Carotene is a vitamin contained in many kinds of vegetables and fruits, giving the yellow-red color. Beta-carotene is the most common form in nature. In the intestine it is partly converted into vitamin A, a fundamental substance for skin and eye well-being and the rest is stored. They are good antioxidants, therefore they take part in tumor prevention. First research in this field started from epidemiologic studies that found a strong relationship between fruit and vegetables consumption prevention some types of cancer.	
21	**Z64010**	**Beta-Carotene in plasma by UV/VIS - FAST**	**1 x 100 tests**
	Z64011	Beta-Carotene in plasma - FAST - Mobile Phase	4 x 500 ml
	Z64020	Liquid Calibrator for beta-Carotene in plasma	2 x 5 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
		OXIDATIVE STRESS MARKERS	
	UNIQUE	INSIGHTS 3-nitrotyrosine is found in many pathological conditions and is considered as a marker of oxidative stress dependent on NO. Nitrotyrosine is found in many tissues affected by diseases, such as the cornea and keratoconus. It is most likely involved in the process of pathogenesis of diabetes. It is identified as an indicator of cell damage and inflammation, as well as an index of NO production. It is believed that measuring the concentration of nitrotyrosine serves as a marker for the damage caused by NO in the cell. Previous studies have shown that nitrotyrosine is found in inflammatory conditions such as atherosclerotic plaques and rheumatoid arthritis.	
22	**Z61010**	**3-Nitrotyrosine in plasma by UV - FAST**	**1 x 100 tests**
	Z61011	3-Nitrotyrosine in plasma by UV - FAST - Mobile Phase	4 x 500 ml
	Z61016	Calibrator for 3-Nitrotyrosine in plasma	4 x 1 ml
	Z61019	Control for 3-Nitrotyrosine in plasma - Levels 1 and 2	2 x 5 x 1 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs

N°	Code	HPLC	Packaging
		VITAMINS	
		INSIGHTS Vitamin D has a fundamental role in the control of calcium and phosphide concentrations in the extracellular matrix and therefore in the bone mineralization processes and in maintaining skeletal integrity. It also has a fundamental role in preventing some pathological processes such as cardiovascular diseases, some tumor forms (colon, breasts), multiple sclerosis, type 1 diabetes and some infectious diseases (tuberculosis, seasonal flu).	
23	**Z19810**	**25-OH-Vitamin D3 and 25-OH-Vitamin D2 in plasma by UV - FAST - reduced volume (Extractive Method)**	**1 x 100 tests**
24	**Z19815**	**25-OH-Vitamin D3 and 25-OH-Vitamin D2 in plasma by UV - FAST- reduced volume (Extractive Method)**	**1 x 500 tests**
	Z19811	25-OH-Vitamin D3 and 25-OH-Vitamin D2 in plasma - FAST- Mobile Phase	4 x 500 ml
	Z19116	Calibrator for 25-OH-Vitamin D3 and 25-OH-Vitamin D2 in plasma	4 x 5 ml
	Z19119	Control for 25-OH-Vitamin D3 and 25-OH-Vitamin D2 in plasma - Levels 1 and 2	2 x 5 x 5 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
		INSIGHTS Vitamin A (retinol) has multiple functions because it is essential not only for sight but also for differentiating epithelial tissues, mesenchymal and spermatogenesis and for the maintaining and development of the placenta. Vitamin E (tocopherol) is essential for a normal muscular development and has antioxidant properties, preventing self-oxidation of strongly unsaturated fatty acids and avoiding their polymerization.	
25	**Z18610**	**Vitamins A/E in plasma by UV - FAST**	**1 x 100 tests**
	Z18611	Vitamins A/E in plasma - FAST - Mobile Phase	4 x 500 ml
	Z18016	Calibrator for Vitamins A/E in plasma	4 x 1 ml
	Z18019	Control for Vitamins A/E in plasma - Levels 1 and 2	2 x 5 x 1 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs



Plasma sample	
RT (min)	**Analyte**
1.2	*Vitamin A*
1.9	*IS*
4.1	*Vitamin E*

N°	Code	HPLC	Packaging
		INSIGHTS Vitamin B1 is an antioxidant molecules, essential for the correct functioning of the nervous system, heart and muscles. Lack of this vitamin, or thiamine, causes damage to the nervous and cardiovascular system. Among the symptoms that may indicate a deficiency of vitamin B1 are loss of appetite and fatigue and, in severe cases, nausea, vomiting, and a general weakening of the muscles.	
26	**Z85010**	**Vitamin B1 in whole blood by Fluorimetry - FAST**	**1 x 100 tests**
	Z85011	Vitamin B1 in whole blood - FAST - Mobile Phase	4 x 500 ml
	Z85016	Calibrator for Vitamin B1 in whole blood	4 x 1 ml
	Z85019	Control for Vitamins B1/B2/B6 in whole blood - Levels 1 and 2	2 x 5 x 1 ml
	Z959961902	Zorbax Eclipse Plus C18 Analytical column ~ 1000 injections (100 x 4,6 mm - 3,5 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29004U	Amber Glass Vials of 2 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs



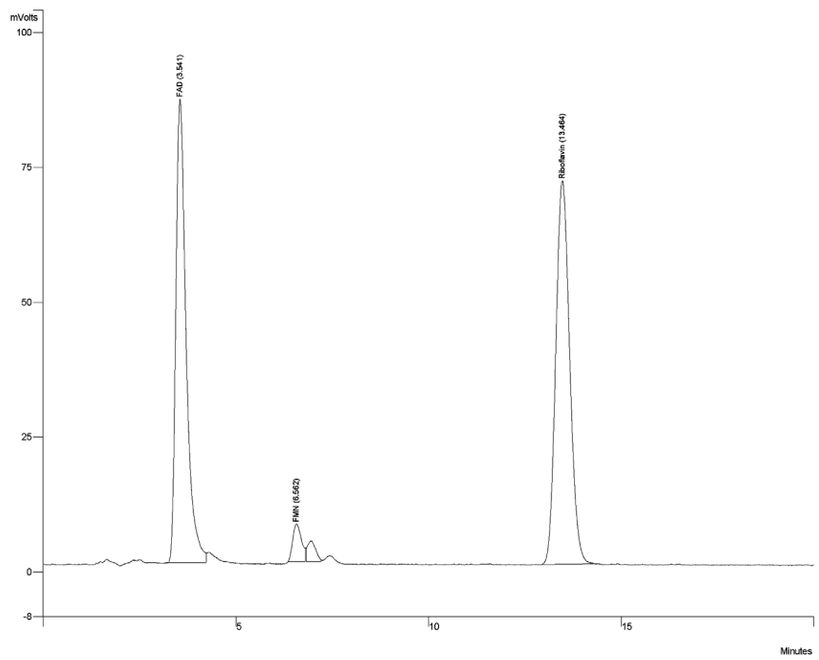
Whole blood sample	
RT (min)	**Analyte**
3.9	*Vitamin B1*
9.2	*IS*

N°	Code	HPLC	Packaging

INSIGHTS

Riboflavin (or vitamin B2) is found mainly in foods such as phosphorylated forms. To be absorbed, it is dephosphorylated by specific phosphatases that are found in the small intestine. Riboflavin is involved in numerous metabolic reactions that can also cover other vitamins. This means that a deficiency of riboflavin can lead to a plurideficience of other vitamins. Symptoms of lack of vitamin B2 are: mitochondrial alterations, increase of lipidic peroxidation, anemic state caused by shortage of iron, increase synthesis of glutathione and consequent decrease of amino acids involved in such processes. The molecule is essential for other metabolic functions, especially the ones involving tissues. It keeps in fact in good health the digestive and respiratory mucus, in addition to contributing to the integrity of the nervous system, skin and eyes. Essential for development and growth, vitamin B2 activates the enzymes involved in many reactions.

27	**Z85110**	**Vitamin B2 in whole blood by Fluorimetry - FAST**	**1 x 100 tests**
	Z85111	Vitamin B2 in whole blood - FAST - Mobile Phase	4 x 500 ml
	Z85116	Calibrator for Vitamin B2 in whole blood	4 x 1 ml
	Z85019	Control for Vitamins B1/B2/B6 in whole blood - Levels 1 and 2	2 x 5 x 1 ml
	Z959961902	Zorbax Eclipse Plus C18 Analytical column ~ 1000 injections (100 x 4,6 mm - 3,5 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29004U	Amber Glass Vials of 2 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs



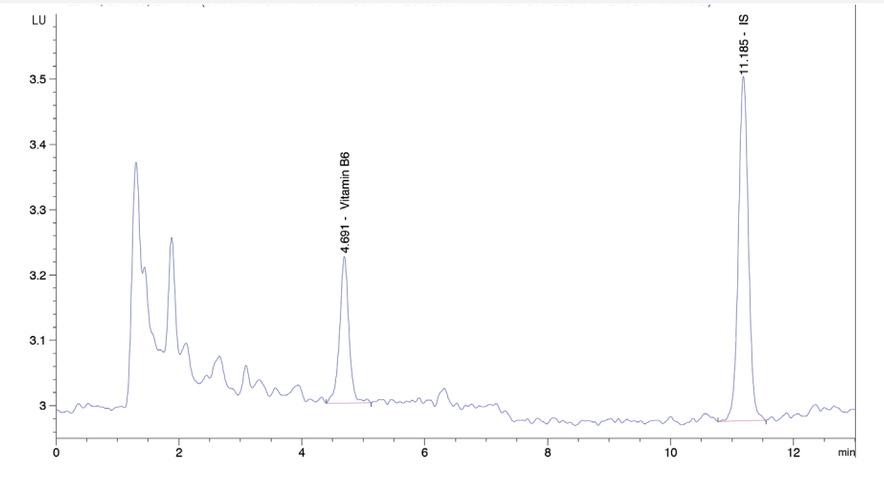
Whole blood calibrator	
RT (min)	**Analyte**
3.5	*Flavin adenine dinucleotide (FAD)*
6.6	*Flavin adenine mononucleotide (FMN)*
13.5	*Riboflavin (B2)*

N°	Code	HPLC	Packaging

INSIGHTS

Vitamin B6 is a water soluble vitamin which forms part of the group B. The vitamins of this group involved in the metabolism of carbohydrates, fats and proteins and are thus essential for the production of energy and for the normal functioning of various organs and systems. Among the symptoms that may indicate a lack of vitamin B6 are depression accompanied with nausea, vomiting, seborrheic dermatitis, lesions of the mucous, glossitis and peripheral neuropathies.

28	**Z85610**	**Vitamin B6 in whole blood by Fluorimetry - FAST**	**1 x 100 tests**
	Z85611	Vitamin B6 in whole blood - FAST - Mobile Phase	4 x 500 ml
	Z85616	Calibrator for Vitamin B6 in whole blood	4 x 1 ml
	Z85019	Control for Vitamins B1/B2/B6 in whole blood - Levels 1 and 2	2 x 5 x 1 ml
	Z959961902	Zorbax Eclipse Plus C18 Analytical column ~ 1000 injections (100 x 4,6 mm - 3,5 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29004U	Amber Glass Vials of 2 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs

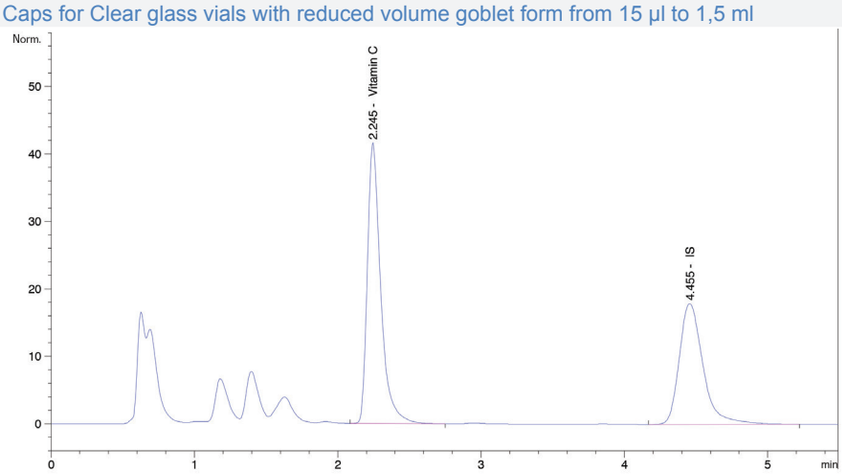


Whole blood sample	
RT (min)	**Analyte**
4.7	*Vitamin B6*
11.2	*IS*

N°	Code	HPLC	Packaging
	NEW	INSIGHTS Vitamin B1 (Thiamine) is essential for the proper functioning of the nervous system, heart and muscles. It also contributes to the formation of red blood cells and plays an adjuvant role in the treatment of herpes zoster. Symptoms that may indicate a deficiency of vitamin B1 are loss of appetite and fatigue, nausea, vomiting, and a general weakening of the muscles.	
29	**Z85710**	**Vitamin B1/B6 in whole blood by Fluorimetry - FAST**	**1 x 100 tests**

	Z85711	Vitamin B1/B6 in whole blood - FAST - Mobile Phase M1	4 x 500 ml
	Z85721	Vitamin B1/B6 in whole blood - FAST - Mobile Phase M2	4 x 500 ml
	Z85716	Calibrator for Vitamins B1/B6 in whole blood	4 x 1 ml
	Z85719	Control Vitamin B1/B6 in whole Blood- Levels 1 and 2	2 x 5 x 1 ml
	ZTF25303154630	Hypersil Gold AQ Analytical column ~1000 injections 3 µm 150 x 4.6 mm	1 pc
	S90199511	Javelin Prefilter (analytical column protection)	1 x 10 pcs
	S29004U	Amber Glass Vials of 2 ml	1 x 100 pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 pcs

N°	Code	HPLC	Packaging
		INSIGHTS Vitamin C is a potent reducing agent that has a key role in many biological processes; it is necessary for the optimal activation of enzymes involved in many hydroxylation reactions, in the production and maintaining of collagen, in the synthesis of bile acids from cholesterol, etc... Lacking of this vitamin can lead to asthenia, anorexia, bone alterations (osteoporosis), depression, anemia and diminished resistance to infections.	
30	**Z20610**	**Vitamin C in plasma by UV - FAST**	**1 x 100 tests**
	Z20611	Vitamin C in plasma - FAST - Mobile Phase	4 x 500 ml
	Z20016	Calibrator for Vitamin C in plasma	4 x 1 ml
	Z20019	Control for Vitamin C in plasma – Levels 1 and 2	2 x 5 x 1 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 1000 Pcs
	S51820717	Caps for Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs



Plasma control (level 1)	
RT (min)	**Analyte**
2.2	*Vitamin C*
4.5	*IS*

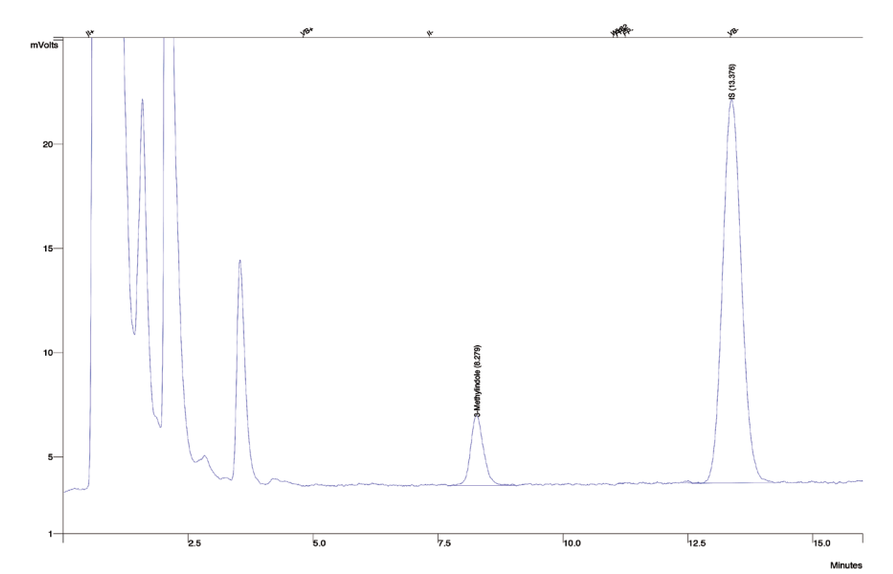
N°	Code	HPLC	Packaging

INTESTINAL DYSBIOSIS MARKERS

INSIGHTS

3-methyl indole or skatole is present in faeces and is derived from biotransformation (decarboxylation) of the amino acid Tryptophan that is found in the digestive tract of mammals. In the colon, there is a large bacterial flora that may be subject to changes that make it harmful to health.When this flora is balanced and useful to the body, there is a balance that is called "eubiosis".When, however, unwanted bacteria appear, they alter the balance and create the "intestinal disbiosis", unfortunately a very common condition. If the intestinal flora is not balanced, the amino acids derived from undigested proteins undergo a decarboxylation process that produces toxic amines, such as 3-methyl indole, resulting from tryptophan. Many of these amines are powerful vasoconstrictive poisons. It should also be noted that 3-methyl indole is responsible for the particularly odour of faeces.

31	**Z60010**	**3-Methylindole (Skatole) in urine by Fluorimetry - FAST**	**1 x 100 tests**
	Z60011	3-Methylindole (Skatole) in urine - FAST - Mobile Phase	4 x 500 ml
	Z60016	Calibrator for 3-Methylindole (Skatole) in urine	4 x 1 ml
	Z60019	Control for 3-Methylindole (Skatole) in urine - Levels 1 and 2	2 x 5 x 1 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs



Spiked urine sample	
RT (min)	**Analyte**
8.3	*3-Methylindole*
13.4	*IS*

N°	Code	HPLC	Packaging

INSIGHTS

Indican is a product of tryptophan metabolism. Tryptophan is first converted to indole. Following absorption from the gut, indole is hydroxylated in the liver and conjugated with sulfuric acid or glucoronic acid. Finally, it is excreted in urine as Indican. The levels of urinary Indican are usually low in clinically healthy individuals (eubiosis). Instead, if there is an imbalance between micro-organisms, a condition called dysbiosis occurs. Some of the symptoms are: poor digestion, swelling, halitosis, increased susceptibility to infections, as well as nervousness, anxiety, sleep disorders and fatigue. The values of Indican present in urine can undergo variations. In particular, an increase occurs in cases of steatorrhea due to pancreatic insufficiency treated with pancreatic enzyme extract, and Hartnup disease, a rare genetic disease characterized by intestinal and renal malabsorption of some amino acids. Furthermore, high levels of this analyte are correlated with a rapid progression of chronic kidney disease in non-dialysate uremic patients. Oral antibiotics, on the other hand, can decrease urinary Indican.

32	**Z60110**	**Indican in urine by Fluorimetry - FAST**	**1 x 100 tests**
	Z60111	Indican in urine by Fluorimetry - FAST - Mobile Phase	4 x 500 ml
	Z60116	Calibrator for Indican in urine	4 x 1 ml
	Z60119	Control for Indican in urine - Levels 1 and 2	2 x 5 x 1 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs

MARKERS FOR METABOLIC DISEASES

INSIGHTS

Porphyrias are a group of hereditary disorders resulting from enzymatic defects in the biosynthetic pathway of heme. Depending on the specific enzyme involved, various porphyrins and their precursors accumulate in different types of samples. Eritrocitary Protoporphyrin IX (PPIX) analysis should be performed in patients with clinical suspicion of erythropoietic protoporphyria (EPP) or X-linked dominant protoporphyria (XLDPP). Common symptoms may include itching, edema, erythema, burning or burning sensation, and occasionally scarring of the skin in sun-exposed areas.

33	**Z39110**	**Free Eritrocitary Protoporphyrin IX (PPIX) and Zinc Protoporphyrin (ZnPP) in whole blood by Fluorimetry - FAST**	**1 x 100 tests**
	Z39111	Free Eritrocitary PPIX and ZnPP in whole blood - FAST - Mobile Phase	4 x 500 ml
	Z39016	Calibrator for PPIX and Znpp in whole blood	1 x 2 x 0,5 ml/ 4 x 1ml
	Z39019	Control for PPIX and Znpp in whole blood - Levels 1 and 2	1 x 4 x 0,5 ml/ 10 x 1 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs

INSIGHTS

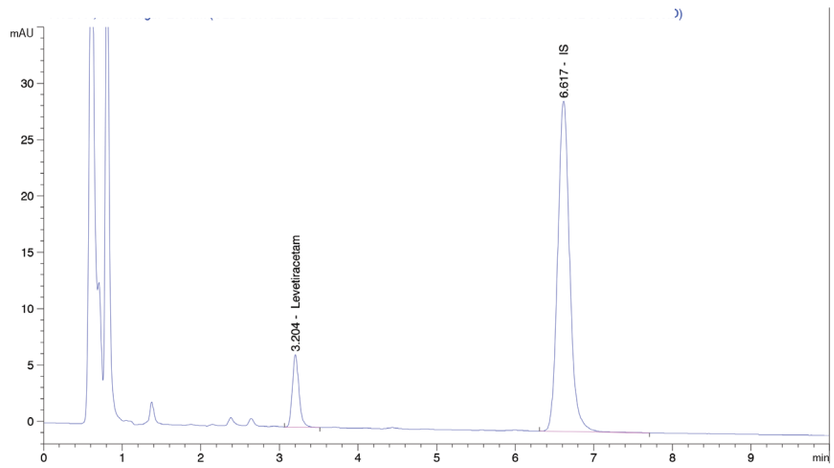
Acute porphyries are metabolic diseases that cause alterations in biochemical processes, mostly in the liver. They neither cause hematologic diseases nor hepatic damage. When porphyrins accumulate in the skin, it becomes particularly sensitive to light causing the typical symptoms of porphyria. The accumulation in the liver of simpler chemical precursors is responsible for more acute attacks. Patterns of porphyrin accumulation in erythrocytes and plasma and excretion of heme precursors in urine and faeces allow to detect and differentiate porphyrias.

34	**Z73010**	**Differentiated Porphyrins in urine by Fluorimetry- FAST** (Coproporphyrin I and Coproporphyrin III, Heptacarboxyporphyrin, Hexacarboxyporphyrin, Pentacarboxyporphyrin, Uroporphyrin I) (Binary gradient pump necessary)	**1 x 100 tests**
	Z73021	Differentiated Porphyrins in urine - Mobile Phase M1	4 x 500 ml
	Z73031	Differentiated Porphyrins in urine - Mobile Phase M2	4 x 500 ml
	Z73016	Multiparametric Calibrator for Differentiated Porphyrins in urine (Coproporphyrin I and Coproporphyrin III, Heptacarboxyporphyrin, Hexacarboxyporphyrin, Pentacarboxyporphyrin, Uroporphyrin I)	4 x 1 ml
	Z73019	Control for differentiated Porphyrins in urine - Levels 1 and 2 (Coproporphyrin I and Coproporphyrin III, Heptacarboxyporphyrin, Hexacarboxyporphyrin, Pentacarboxyporphyrin, Uroporphyrin I)	2 x 5 x 1 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs

THERAPEUTIC DRUG MONITORING

N°	Code	HPLC	Packaging
		ANTIEPILEPTICS	
		INSIGHTS Treatment of an epileptic patient requires pharmacological and psychological contributions. In such a context the pharmacological therapy and the consequent monitoring have a decisive role in the immediate control of epileptic crisis and in the prevention in the medium/long run of recurrence. Thanks to the monitoring of plasmatic concentrations of antiepileptic pharmaceuticals, it is in some cases possible to personalize the treatment for a single patient.	
35	**Z03310**	**Lamotrigine in serum and in plasma by UV - FAST**	**1 x 100 tests**
	Z03311	Lamotrigine in serum and in plasma - FAST - Mobile Phase	4 x 500 ml
	Z03016	Calibrator for Lamotrigine in plasma	4 x 2 ml
	Z03019	Control for Lamotrigine in plasma - Levels 1 and 2	2 x 5 x 2 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
36	**Z42110**	**Lamotrigine and 10,11-Dihydro-10-Hydroxycarbazepine in serum and in plasma by UV - FAST**	**1 x 100 tests**
	Z42111	Lamotrigine and 10,11-Dihydro-10-Hydroxycarbazepine in serum and in plasma - FAST - Mobile Phase	4 x 500 ml
	Z04216	Calibrator for Lamotrigine and 10,11-Dihydro-10-Hydroxycarbazepine in plasma	4 x 2 ml
	Z04219	Control for Lamotrigine and 10,11-Dihydro-10-Hydroxycarbazepine in plasma - Levels 1 and 2	2 x 5 x 2 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs

N°	Code	HPLC	Packaging
37	**Z84010**	**Levetiracetam in plasma by UV - FAST**	**1 x 100 tests**
	Z84011	Levetiracetam in plasma - FAST - Mobile Phase	4 x 500 ml
	Z04316	Calibrator for Levetiracetam in plasma	4 x 2 ml
	Z04319	Control for Levetiracetam in plasma - Levels 1 and 2	2 x 5 x 2 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs

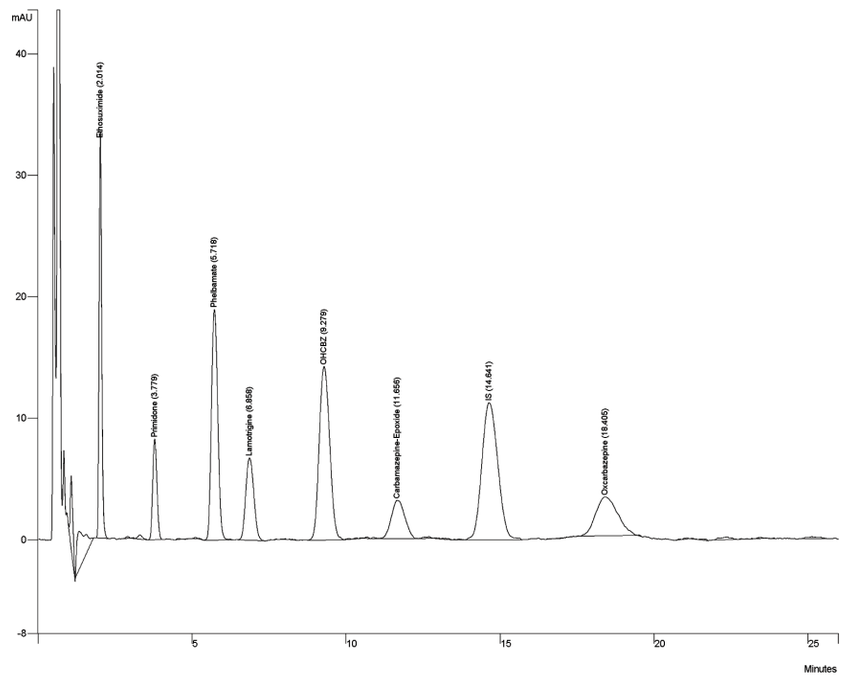


Plasma calibrator	
RT (min)	**Analyte**
3.2	*Levetiracetam*
6.6	*IS*

38	**Z79210**	**Perampanel in plasma by Fluorimetry - FAST**	**1 x 100 tests**
	Z79211	Perampanel in plasma - FAST - Mobile Phase	4 x 500 ml
	Z79216	Calibrator for Perampanel in plasma	4 x 1 ml
	Z79219	Control for Perampanel in plasma - Levels 1 and 2	2 x 5 x 1 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs

N°	Code	HPLC	Packaging
39	**Z77010**	**Topiramate in plasma by Fluorimetry (Extractive Method)**	**1 x 100 tests**
	Z77011	Topiramate in plasma - Mobile Phase	4 x 500 ml
	Z77016	Calibrator for Topiramate in plasma	4 x 5 ml
	Z77019	Control for Topiramate in plasma - Levels 1 and 2	2 x 5 x 5 ml
	ZTF25805154630	Hypersil Gold CN Eclipse Plus C18 Analytical column ~ 1000 injections (150 x 4,6 mm - 5 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
40	**Z05310**	**Valproic Acid in plasma by UV - FAST**	**1 x 100 tests**
	Z05311	Valproic Acid in plasma - FAST - Mobile Phase	4 x 500 ml
	Z05116	Calibrator for Valproic Acid in plasma	4 x 1 ml
	Z05119	Control for Valproic Acid in plasma - Levels 1 and 2	2 x 5 x 1 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
41	**Z80010**	**Antiepileptics 1 in serum and in plasma by UV - FAST** (Carbamazepine, Phenobarbital, Phenytoin)	**1 x 100 tests**
	Z80011	Antiepileptics 1 in serum and in plasma - FAST - Mobile Phase	4 x 500 ml
	Z04016	Calibrator for Antiepileptics 1 in plasma (Carbamazepine, Phenobarbital, Phenytoin)	4 x 2 ml
	Z04019	Control for Antiepileptics 1 in plasma - Levels 1 and 2 (Carbamazepine, Phenobarbital, Phenytoin)	2 x 5 x 2 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs

N°	Code	HPLC	Packaging
42	**Z82010**	**Antiepileptics 3 in serum and in plasma by UV - FAST** (Carbamazepine-Epoxide, Ethosuximide, Lamotrigine, 10,11-Dihydro-10-Hydroxycarbazepine, Oxcarbazepine, Primidone, Phelbamate)	**1 x 100 tests**
	Z82011	Antiepileptics 3 in serum and in plasma - FAST - Mobile Phase	4 x 500 ml
	Z04716	Calibrator for Antiepileptics 3 in plasma (Carbamazepine-Epoxide, Ethosuximide, Lamotrigine, 10,11-Dihydro-10-Hydroxycarbazepine, Oxcarbazepine, Primidone, Phelbamate)	4 x 2 ml
	Z04719	Control for Antiepileptics 3 in plasma - Levels 1 and 2 (Carbamazepine-Epoxide, Ethosuximide, Lamotrigine, 10,11-Dihydro-10-Hydroxycarbazepine, Oxcarbazepine, Primidone, Phelbamate)	2 x 5 x 2 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs



Plasma calibrator	
RT (min)	**Analyte**
2.0	*Ethosuximide*
3.8	*Primidone*
5.7	*Phelbamate*
6.9	*Lamotrigine*
9.3	*10, 110-Dihydro-10-Hydroxycarbazepine (OHCBZ)*
11.7	*Carbamazepine-Epoxide*
14.6	*IS*
18.4	*Oxcarbazepine*

N°	Code	HPLC	Packaging
43	**Z83010**	**Antiepileptics 4 in serum and in plasma by UV - FAST** (10,11-Dihydro-10-Hydroxycarbazepine, Lamotrigine, Zonisamide)	**1 x 100 tests**
	Z83011	Antiepileptics 4 in serum and in plasma - FAST - Mobile Phase	4 x 500 ml
	Z04816	Calibrator for Antiepileptics 4 in plasma (10,11-Dihydro-10-Hydroxycarbazepine, Lamotrigine, Zonisamide)	4 x 2 ml
	Z04819	Control for Antiepileptics 4 in plasma - Levels 1 and 2 (10,11-Dihydro-10-Hydroxycarbazepine, Lamotrigine, Zonisamide)	2 x 5 x 2 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
44	**Z83110**	**Antiepileptics 5 in serum and in plasma by UV - FAST** (Desmethylsuximide, Lacosamide, Methsuximide, Phenytoin, Rufinamide)	**1 x 100 tests**
	Z83111	Antiepileptics 5 in serum and in plasma - FAST - Mobile Phase	4 x 500 ml
	Z04916	Calibrator for Antiepileptics 5 in plasma (Desmethylsuximide, Lacosamide, Methsuximide, Phenytoin, Rufinamide)	4 x 2 ml
	Z04919	Control for Antiepileptics 5 in plasma - Levels 1 and 2 (Desmethylsuximide, Lacosamide, Methsuximide, Phenytoin, Rufinamide)	2 x 5 x 2 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
45	**Z87010**	**Antiepileptics 6 in serum and in plasma by UV - FAST** (10,11-Dihydro-10-Hydroxycarbazepine, Ethosuximide, Lacosamide, Lamotrigine, Primidone, Zonisamide)	**1 x 100 tests**
	Z87011	Antiepileptics 6 in serum and in plasma - FAST - Mobile Phase	4 x 500 ml
	Z87016	Calibrator for Antiepileptics 6 in plasma (Lacosamide, Ethosuximide, Zonisamide, Primidone, Lamotrigine, 10,11-Dihydro-10-Hydroxycarbazepine)	4 x 2 ml
	Z87019	Control for Antiepileptics 6 in plasma - Levels 1 and 2 (Lacosamide, Ethosuximide, Zonisamide, Primidone, Lamotrigine, 10,11-Dihydro-10-Hydroxycarbazepine)	2 x 5 x 2 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs

N°	Code	HPLC	Packaging
		ANTIARRHYTHMICS	
		INSIGHTS Flecainide is a class IC antiarrhythmic drug according to the classification of Vaughan-Williams. It works by slowing the myocardial cell depolarization (phase 0), primarily on the conduction system of the His-Purkinje (conduction H-V) and, to a lesser extent, the nodal conduction and atrioventricular septal. Propafenone is anti-arrhythmic drug blocking sodium channels (Class IC). Its predominant effect is thus made by depression of the conduction velocity at the level of all the cardiac structures. Verapamil is an inhibitor of transmembrane flows of calcium ion, attive on vascular smooth muscle and on myocyte in reducing myocardial contractility and tone; it is also equipped with antiarrhythmic properties.	
46	**Z78010**	**Antiarrhythmics in plasma by UV - FAST (Extractive Method)** (Flecainide, Propafenone, Verapamil)	**1 x 100 tests**
	Z78011	Antiarrhythmics in plasma - FAST - Mobile Phase	4 x 500 ml
	Z78016	Calibrator for Antiarrhythmics in plasma (Flecainide, Propafenone, Verapamil)	4 x 2 ml
	Z78019	Control for Antiarrhythmics in plasma - Levels 1 and 2 (Flecainide, Propafenone, Verapamil)	2 x 5 x 2 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
		INSIGHTS Amiodarone is an antiarrhythmic agent used for various types of tachyarrhythmias, both ventricular and supraventricular arrhythmias. Amiodarone shows beta blocker-like and calcium channel blocker-like actions on the SA and AV nodes, increases the refractory period via sodium -and potassium – channel effects, and slows intra-cardiac conduction of the cardiac action potential, via sodium-channel effects. Amiodarone is extensively metabolised in the liver, and can affect the metabolism of numerous other drugs.	
47	**Z33610**	**Amiodarone/Desethylamiodarone in serum and in plasma by UV - FAST**	**1 x 100 tests**
	Z33611	Amiodarone/Desethylamiodarone in serum and in plasma - FAST - Mobile Phase	4 x 500 ml
	Z33016	Calibrator for Amiodarone/Desethylamiodarone in plasma	4 x 2 ml
	Z33019	Control for Amiodarone/Desethylamiodarone in plasma - Levels 1 and 2	2 x 5 x 2 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
		INSIGHTS Sotalol is an active ingredient specifically used in the treatment cardiac arrhythmias. Among nonselective beta-blockers, sotalol is one of the most water-soluble and in addition to beta-blocking activity, is able to block the potassium channel, acting as an antiarrhythmic class III. This allows the use of the drug for atrial fibrillation in conjunction with ventricular tachyarrhythmias. Sotalol is a drug that has long been studied because of its unique pharmacological properties, showing both beta-blocking and blocking activity of the potassium channels.	
48	**Z78110**	**Sotalol in plasma by Fluorimetry - FAST**	**1 x 100 tests**
	Z78111	Sotalol in plasma by Fluorimetry - FAST - Mobile Phase	4 x 500 ml
	Z78116	Calibrator for Sotalol in plasma	4 x 1 ml
	Z78119	Control for Sotalol in plasma – Levels 1 and 2	2 x 5 x 1 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs

N°	Code	HPLC	Packaging
		DRUGS FOR PANIC, ANXIETY OR MENTAL DISORDERS	
		INSIGHTS Benzodiazepines are elective drugs in the therapy of anxiety syndromes. Each benzodiazepine has different effects: anxiolytic, hypnotic, sedative, relaxant and anticonvulsive. All benzodiazepines are effective in episodes of anxiety and insomnia and the speed of action depends on how fast they can reach efficient Central Nervous System (CNS) concentrations. Treatment with benzodiazepines induces tolerance and addiction.	
49	**Z34610**	**Benzodiazepines 1 in serum and in plasma by UV - FAST** **(Extractive Method)** (Bromazepam, Clonazepam, Chlordemethyldiazepam, Flunitrazepam, Lorazepam)	**1 x 100 tests**
	Z34611	Benzodiazepines 1 in serum and in plasma - FAST - Mobile Phase	4 x 500 ml
	Z34016	Calibrator for Benzodiazepines 1 in serum (Bromazepam, Clonazepam, Chlordemethyldiazepam, Flunitrazepam, Lorazepam)	4 x 5 ml
	Z34019	Control for Benzodiazepines 1 in serum - Levels 1 and 2 (Bromazepam, Clonazepam, Chlordemethyldiazepam, Flunitrazepam, Lorazepam)	2 x 5 x 5 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
50	**Z35610**	**Benzodiazepines 2 in serum and in plasma by UV - FAST** **(Extractive Method)** (Clobazam, Diazepam, Midazolam, Nitrazepam, Nordiazepam)	**1 x 100 tests**
	Z35611	Benzodiazepines 2 in serum and in plasma - FAST - Mobile Phase	4 x 500 ml
	Z35016	Calibrator for Benzodiazepines 2 in serum (Clobazam, Diazepam, Midazolam, Nitrazepam, Nordiazepam)	4 x 5 ml
	Z35019	Control for Benzodiazepines 2 in serum - Levels 1 and 2 (Clobazam, Diazepam, Midazolam, Nitrazepam, Nordiazepam)	2 x 5 x 5 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs

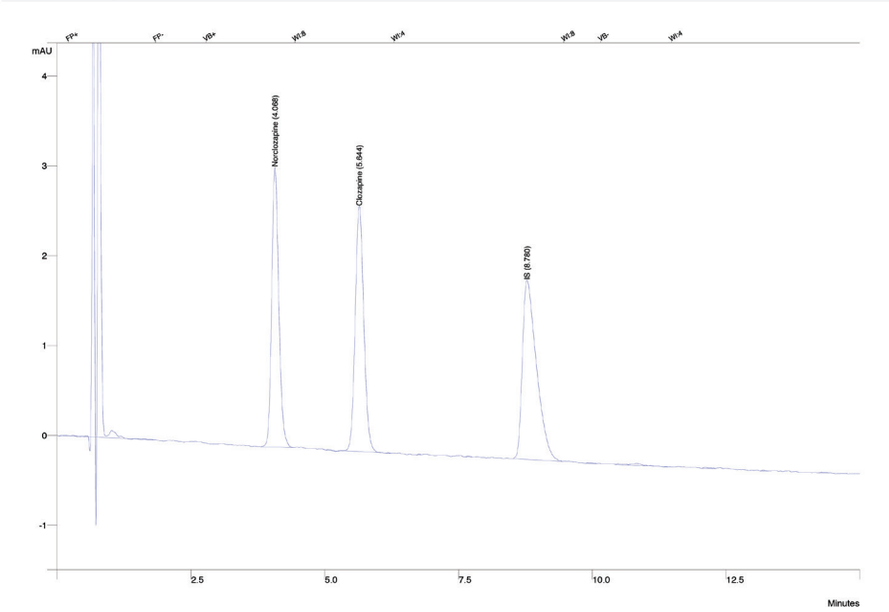
N°	Code	HPLC	Packaging

INSIGHTS

Clozapine is an atypical neuroleptic drug, belonging to the chemical family of Di-Benzodiazepines, widely used in the treatment of persistent schizophrenia. Unlike other neuroleptics, it does not induce extrapyramidal side effects, despite its efficacy. Its use is limited because it may cause agranulocytosis. From research it has been found that plasmatic levels of Clozapine and Norclozapine are influenced by factors such as: gender, age, compliance, caffeine intake, smoking and pharmacological interactions.

51	**Z76610**	**Clozapine/Norclozapine in serum and in plasma by UV - FAST** **(Extractive Method)**	**1 x 100 tests**

Z76611	Clozapine/Norclozapine in serum and in plasma - FAST - Mobile Phase	4 x 500 ml
Z76016	Calibrator for Clozapine and Norclozapine in plasma	4 x 2 ml
Z76019	Control for Clozapine and Norclozapine in plasma - Levels 1 and 2	2 x 5 x 2 ml
Z699975905	Poroshell 120, EC-CN Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs



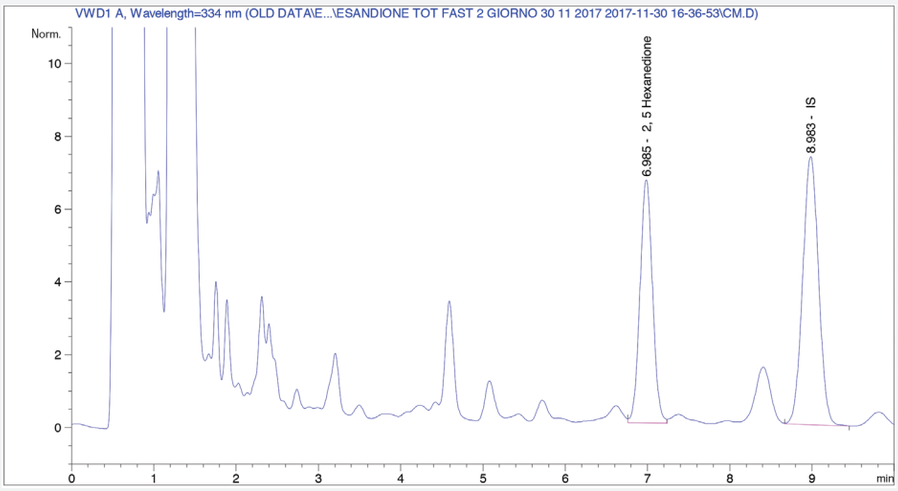
Serum calibrator	
RT (min)	**Analyte**
4.1	*Norclozapine*
5.6	*Clozapine*
8.8	*IS*

N°	Code	HPLC	Packaging
		INSIGHTS Tricyclic Antidepressants (abbreviation TAD) are a class of antidepressant drugs first used in the 1950s. They are named after the drug's molecular structure, which contains three rings of atoms. They are used in numerous applications; mainly indicated for the treatment of clinical depression, neuropathic pain, nocturnal enuresis and attention-deficit hyperactivity disorder (ADHD), etc. Tricyclic antidepressants overdose is a significant cause of fatal drug poisoning.	
52	**Z56010**	**Tricyclic Antidepressants (TAD) in serum and in plasma by UV** **(Extractive Method)** (Amitriptiline, Desipramine, Doxepine, Imipramine, Nordoxepine, Nortriptiline)	**1 x 100 tests**
	Z56011	Tricyclic Antidepressants in serum and in plasma Mobile Phase	4 x 500 ml
	Z56016	Calibrator for Tricyclic Antidepressants in plasma (Amitriptiline, Desipramine, Doxepine, Imipramine, Nordoxepine, Nortriptiline)	4 x 5 ml
	Z56019	Control for Tricyclic Antidepressants in plasma - Levels 1 and 2 (Amitriptiline, Desipramine, Doxepine, Imipramine, Nordoxepine, Nortriptiline)	2 x 5 x 5 ml
	ZTF25805154630	Hypersil Gold CN Analytical column ~ 1000 injections (150 x 4,6 mm - 5 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
		IMMUNOSUPPRESSANT	
		INSIGHTS Mycophenolic Acid or Mycophenolate is an immunosuppressant drug used to prevent rejection in organ transplantation. It was initially marketed as the prodrug mycophenolate mofetil to improve oral bioavailability. Mycophenolate mofetil is metabolized in the liver to active moiety mycophenolic acid. It inhibits Inosine monophosphate dehydrogenase, the enzyme which controls the rate of synthesis of guanine monophosphate in the *de novo* pathway of purine synthesis used in the proliferation of B and T lymphocytes. Mycophenolate is potent and can be used in place of the older antiproliferative azathioprine. It is usually used as part of triple-therapy including a calcineurin inhibitor (cyclosporin or tacrolimus) and prednisolone.	
53	**Z01960**	**Mycophenolic Acid in serum and in plasma by UV - FAST**	**1 x 100 tests**
	Z01961	Mycophenolic Acid in serum and in plasma - FAST - Mobile Phase	4 x 500 ml
	Z01916	Calibrator for Mycophenolic Ac. in plasma	4 x 2 ml
	Z01919	Control for Mycophenolic Ac. in plasma - Levels 1 and 2	2 x 5 x 2 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs

N°	Code	HPLC	Packaging
		ANTI-INFECTIVE DRUGS	
		INSIGHTS Technically, an "antibiotic" is defined as a substance of natural origin produced by a microorganism, capable of killing another. The term in the current common use indicates a drug, of natural origin or synthesis (chemotherapy) able to slow down or stop the proliferation of bacteria. Antibiotics are therefore divided into bacteriostatic (i.e. they block the reproduction of the bacterium, preventing its splitting) and bactericidal (i.e. they directly kill the micro-organism). Usually they have no effect against viruses, fungi and parasites, on which other kinds of chemotherapy act.	
54	**Z91010**	**Antibiotics in plasma by UV – FAST** (Ampicillin, Ceftriaxone, Ciprofloxacin, Ceftazidime, Cefoxitin, Daptomycin, Levofloxacin, Linezolid, Meropenem, Piperacillin, Tazobactam)	**1 x 100 tests**
	Z91011	Antibiotics in plasma by UV – FAST - Mobile Phase	4 x 500 ml
	Z91016	Calibrator for Antibiotics in plasma (Ampicillin, Ceftriaxone, Ciprofloxacin, Ceftazidime, Cefoxitin, Daptomycin, Levofloxacin, Linezolid, Meropenem, Piperacillin, Tazobactam)	4 x 1 ml
	Z91019	Control for Antibiotics in plasma – Levels 1 and 2 (Ampicillin, Ceftriaxone, Ciprofloxacin, Ceftazidime, Cefoxitin, Daptomycin, Levofloxacin, Linezolid, Meropenem, Piperacillin, Tazobactam)	2 x 5 x 1 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection) 1 x 10 Pcs	1 x 10 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume from 15 µl to 1,5 ml and for amber vial	1 x 100 Pcs
		INSIGHTS Systemic fungus infections are the main cause of death in patients where the immune system is compromised because of cancer or chemotherapy, organ transplants or HIV-1. Fungi commonly cause superficial infections of the skin or other soft tissues. A correct monitoring of plasmatic levels of antimycotics is necessary, in order to make sure the concentration is sufficient but not too toxic.	
55	**Z79010**	**Antimycotics in plasma by Fluorimetry - FAST** (Hydroxy Itraconazole, Itraconazole, Posaconazole, Voriconazole)	**1 x 100 tests**
	Z79011	Antimycotics in plasma - FAST - Mobile Phase	4 x 500 ml
	Z79016	Calibrator for Antimycotics in plasma (Hydroxy Itraconazole, Itraconazole, Posaconazole, Voriconazole)	4 x 1 ml
	Z79019	Control for Antimycotics in plasma - Levels 1 and 2 (Hydroxy Itraconazole, Itraconazole, Posaconazole, Voriconazole)	2 x 5 x 1 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
		ANTI-DIABETES DRUGS	
	UNIQUE	INSIGHTS The metformin active ingredient with euglycemic action, is the drug of choice for the treatment of type 2 diabetes as monotherapy or in combination with sulfonylureas or insulin. Moreover, in adults, particularly in overweight, it is used as the first line after the failure of diet therapy, in monotherapy or in combination with other oral agents or insulin euglycemic; in children from 10 years of age and adolescents, alone or in combination with insulin.	
56	**Z88110**	**Metformin in serum by UV/VIS - FAST**	**1 x 100 tests**
	Z88111	Metformin in serum - FAST - Mobile Phase	4 x 500 ml
	Z88110B	Reagent B - Conditioning Sol. and Column Wash - Metformin in serum	1 x 500 ml
	Z88116	Calibrator for Metformin in serum	4 x 2 ml
	Z88119	Control for Metformin in serum - Levels 1 and 2	2 x 5 x 2 ml
	Z51902433	Bio SCX NP10 Analytical column ~ 1000 injections (250 x 4,6 mm - 10 µm) specific for Metformin	1 Pc
	Z51902434	Prefilters Bio SCX NP10 (4 x 10 mm) specific for Metformin	1 Pc
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs

OCCUPATIONAL TOXICOLOGY

N°	Code	HPLC	Packaging
		INSIGHTS 2,5 Hexanedione is an aliphatic diketone. It is a product of biochemical transformation of hexane. Hexane is a common component of glues used in the production of shoes or leathers. Inhalation is the major way of absorption, while ingestion, eye and skin absorption can also occur. It is then metabolised into 2,5 hexanedione and eliminated by urine. For these reasons 2,5 hexanedione testing is used to determine the risk of exposure to hexane. Additionally, 2,5 hexanedione levels are related to the quantity of hexane adsorbed. From a clinical point of view 2,5 hexanedione is considered one of the most important metabolites of hexane in the development of polyneuropathies in leather workers and shoemakers.	
57	**Z05210**	**Total 2,5 Hexanedione in urine by UV - FAST**	**1 x 100 tests**
	Z05211	Total 2,5 Hexanedione in urine - FAST - Mobile Phase	4 x 500 ml
	Z05020	Liquid Calibrator for 2,5 Hexanedione in urine	2 x 5 ml
	Z959961902	Zorbax Eclipse Plus C18 Analytical column ~ 1000 injections (100 x 4,6 mm - 3,5 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs



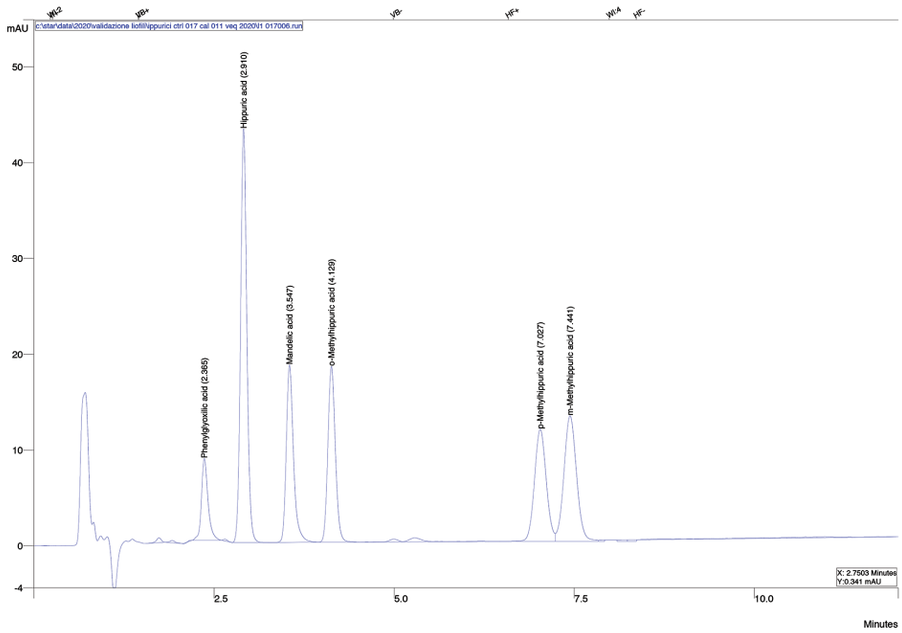
Urine calibrator	
RT (min)	**Analyte**
7.0	*2, 5 Hexanedione*
9.0	*IS*

N°	Code	HPLC	Packaging
58	Z05910	Free 2,5 Hexanedione in urine by Fluorimetry - FAST (Extractive Method)	1 x 100 tests
	Z05911	Free 2,5 Hexanedione in urine - FAST - Mobile Phase	4 x 500 ml
	Z05020	Liquid Calibrator for 2,5 Hexanedione in urine	2 x 5 ml
	Z959943902	Zorbax Eclipse Plus 120 EC - C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 3,5 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs

N°	Code	HPLC	Packaging
		INSIGHTS Acetone is a colorless, mobile, flammable liquid. It is readily soluble in water, ethanol, ether etc., and itself serves as an important solvent. Acetone is the strongest consumer-grade solvent available. It is ideal for thinning fibreglass resin, cleaning fibreglass tools and dissolving two-part epoxies and superglue before hardening. Acetone is an irritant and inhalation may lead to hepatotoxic effects (causing liver damage). The vapours should be avoided. In no circumstance should it be consumed directly or indirectly. Always use goggles when handling Acetone; it can cause permanent eye damage (corneal clouding). Small amounts of Acetone are metabolically produced in the body, mainly from fat. In Humans, fasting significantly increases its endogenous production (ketosis). Acetone can be elevated in diabetes. Accidental intake of large amounts of Acetone may lead to unconsciousness and death.	
59	**Z42210**	**Acetone in urine by UV - FAST (Extractive Method)**	**1 x 100 tests**
	Z42211	Acetone in urine - FAST - Mobile Phase	4 x 500 ml
	Z42020	Liquid Calibrator for Acetone in urine	2 x 5 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
	UNIQUE	INSIGHTS Methanol, also known as methyl alcohol, carbinol, wood alcohol, wood naphtha or wood spirits, is a chemical compound with chemical formula CH_3OH (often abbreviated MeOH). It is the simplest alcohol, and is a light, volatile, colourless, flammable, poisonous liquid with a distinctive odour that is somewhat milder and sweeter than ethanol (ethyl alcohol). At room temperature it is a polar liquid and is used as an antifreeze, solvent, fuel, and as a denaturant for ethyl alcohol. It is also used for producing biodiesel via transesterification reaction. The largest use of methanol by far, is in making other chemicals. About 40% of methanol is converted to formaldehyde, and from there into products as diverse as plastics, plywood, paints, explosives and permanent press textiles. Methanol is toxic by two mechanisms. Firstly, methanol (whether it enters the body by ingestion, inhalation, or absorption through the skin) can be fatal due to its CNS depressant properties in the same manner as ethanol poisoning. Secondly, it is toxic by its breakdown (toxication) by the enzyme alcohol dehydrogenase in the liver by forming formic acid and formaldehyde which cause permanent blindness by destruction of the optic nerve. Fetal tissue will not tolerate methanol. Dangerous doses will build up if a person is regularly exposed to vapours or handles liquid without skin protection. If methanol has been ingested, a doctor should be contacted immediately. The usual fatal dose is 100-125 mL. Toxic effects take hours to start, and effective antidotes can often prevent permanent damage.	
60	**Z45610**	**Methanol in urine by UV - FAST**	**1 x 100 tests**
	Z45611	Methanol in urine - FAST - Mobile Phase	4 x 500 ml
	Z05620	Liquid Calibrator for Methanol in urine	2 x 5 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs

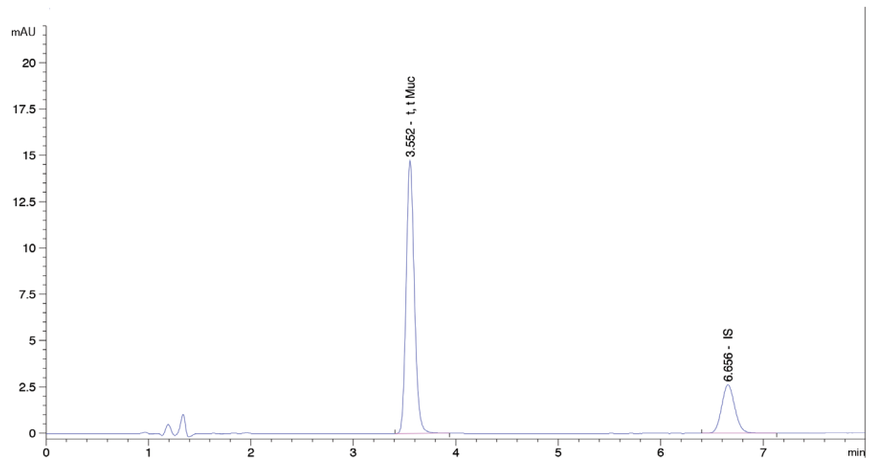
N°	Code	HPLC	Packaging
		INSIGHTS The determination of Hippuric Acid (HPA) in urine is important to evaluate the risk due to exposure to Toluene . Toluene is metabolised mostly in Benzoic Acid and subsequently combined with Glycine is eliminated by urine as Hippuric Acid. The determination of o-m-p Methylhippuric Acid (m-MHPA, o-MHPA and p-MHPA) is important to evaluate the risk due to exposure to a mixture of o-m-p-Xilene. Xilene, which is present as a mixture of three isomers o-m-p, is metabolised in o-m-p-Methyl-Benzoic and after conjugation with Glycine is eliminated by urine as a mixture of o-m-p-Methyl-Hippuric Acids.	
61	**Z06110**	**Hippuric Acid/o-m-p-Methylhippuric Acids in urine by UV - FAST**	**1 x 100 tests**
62	**Z06115**	**Hippuric Acid/o-m-p-Methylhippuric Acids in urine by UV - FAST**	**1 x 500 tests**
	Z06111	Hippuric Ac./o-m-p-Methylhippuric Ac. in urine - FAST - Mobile Phase	4 x 500 ml
	Z06016	Multiparametric Calibrator for 6 Parameters in urine (Hippuric Acid, Mandelic Acid, Phenylglyoxilic Acid, Total Methylhippuric Acids)	4 x 5 ml
	Z38019	Multiparametric Control for Toxic Organic Compounds in urine - Levels 1 and 2 (1-Hydroxypyrene, 1,2-Cyclohexanediol, Hippuric Acid, Mandelic Acid, Phenylglyoxylic Aci, S-phenylmercapturic Acid, t,t-Muconic Acid, Total Methylhippuric Acids, Trichloroacetic Acid)	2 x 5 x 10 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
		INSIGHTS The determination of Phenylglycolic Acid and Mandelic Acid is used for the biological monitoring of individuals exposed to Styrene. Styrene is in fact transformed by the organism in Styrene-Oxide first, then in Phenyl-Ethyl-Glycol and lastly to Mandelic and Phenylglycolic Acid, which are expelled without further modifications.	
63	**Z07110**	**Phenylglyoxilic Acid/Mandelic Acid in urine by UV - FAST**	**1 x 100 tests**
	Z07111	Phenylglyoxilic Acid/Mandelic Acid in urine - FAST - Mobile Phase	4 x 500 ml
	Z06016	Multiparametric Calibrator for 6 Parameters in urine (Hippuric Acid, Mandelic Acid, Phenylglyoxilic Acid, Total Methylhippuric Acids)	4 x 5 ml
	Z38019	Multiparametric Control for Toxic Organic Compounds in urine - Levels 1 and 2 (1-Hydroxypyrene, 1,2-Cyclohexanediol, Hippuric Acid, Mandelic Acid, Phenylglyoxylic Aci, S-phenylmercapturic Acid, t,t-Muconic Acid, Total Methylhippuric Acids, Trichloroacetic Acid)	2 x 5 x 10 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs

N°	Code	HPLC	Packaging
		INSIGHTS The determination of urinary Hippuric Acid is used for the biological monitoring of people exposed to Toluene. Toluene is transformed in the organism mostly to Benzoic Acid, which, after conjugating with Glycine, is expelled by urine under the form of Hippuric Acid. The determination of o-m-p-Methylhippuric Acids is used for the biological monitoring of people exposed to o-m-p-Xylene. Xylene is present as a mixture of the three isomers o-m-p and it is transformed in a mixture of o-m-p-Methyl-Benzoic Acids which after conjugation with Glycine are expelled as a mixture of o-m-p-Methylhippuric Acids by urine.	
64	**Z06610**	**Phenylglyoxilic/Mandelic/Hippuric/o-m-p-Methylhippuric Acids in urine by UV - FAST**	**1 x 100 tests**
65	**Z06615**	**Phenylglyoxilic/Mandelic/Hippuric/o-m-p-Methylhippuric Acids in urine by UV - FAST**	**1 x 500 tests**
	Z06611	Phenylglyoxilic/Mandelic/Hippuric/o-m-p-Methylhippuric Acids in urine - FAST - Mobile Phase	4 x 500 ml
	Z06016	Multiparametric Calibrator for 6 Parameters in urine (Hippuric Acid, Mandelic Acid, Phenylglyoxilic Acid, Total Methylhippuric Acids)	4 x 5 ml
	Z38019	Multiparametric Control for Toxic Organic Compounds in urine - Levels 1 and 2 (1-Hydroxypyrene, 1,2-Cyclohexanediol, Hippuric Acid, Mandelic Acid, Phenylglyoxylic Aci, S-phenylmercapturic Acid, t,t-Muconic Acid, Total Methylhippuric Acids, Trichloroacetic Acid)	2 x 5 x 10 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs



Urine control (level 1)	
RT (min)	**Analyte**
2.4	*Phenylglyoxilic acid*
2.9	*Hippuric acid*
3.5	*Mandelic acid*
4.1	*o-Methylhippuric acid*
7.0	*p-Methylhippuric acid*
7.4	*m-Methylhippuric acid*

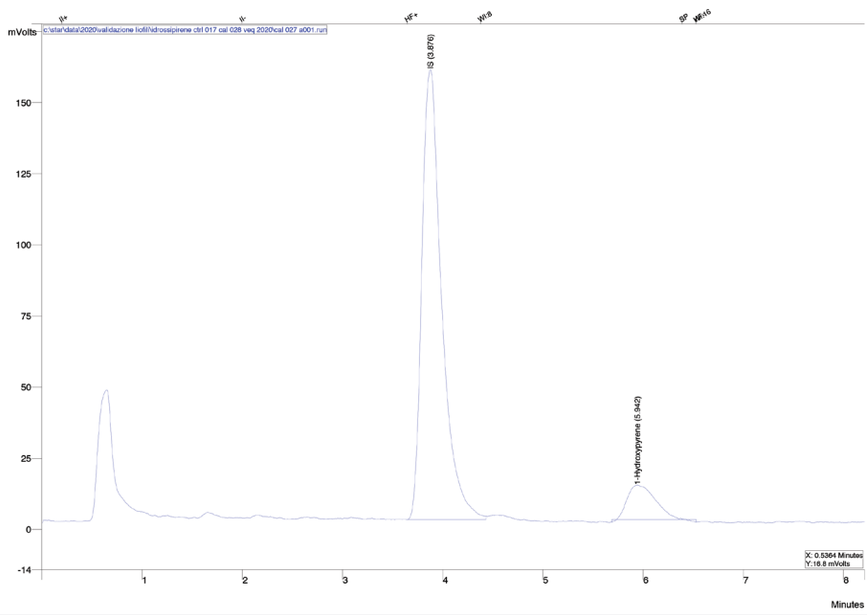
N°	Code	HPLC	Packaging
		INSIGHTS t,t- Muconic Acid (t,t-MA) is proposed as a valid, sensitive and reliable biological marker for workers exposed to Benzene. It is a chemical frequently present in mineral oils and it is easily formed in combustion processes. There is therefore an important polluting risk. Its levels in the atmosphere can easily increase because of combustions of carbon and petrol, stocking and leakages of benzene, vehicles exhaustions and evaporations from gas distributors. Acute benzene exposition can cause vertigo, sleepiness, dizziness, tachycardia, tremors, confusion or unconsciousness or even death. It was demonstrated that Benzene has toxic effects on the erythropoiesis process and was identified as carcinogenic, can cause anemia, bleeding and can damage the immune system and reproductive organs.	
66	**Z23210**	**t,t- Muconic Acid in urine by UV - FAST (Extractive Method)**	**1 x 100 tests**
	Z23211	t,t- Muconic Acid in urine - FAST - Mobile Phase	4 x 500 ml
	Z23016	Calibrator for t,t-Muconic Acid in urine	4 x 5 ml
	Z38019	Multiparametric Control for Toxic Organic Compounds in urine - Levels 1 and 2 (Hippuric Acid, 1-Hydroxypyrene, 1,2-Cyclohexanediol, Total Methylhippuric Acids, Mandelic Acid, t,t-Muconic Acid, Trichloroacetic Acid, S-phenylmercapturic Acid, Phenylglyoxylic Acid)	2 x 5 x 10 ml
	Z959961902	Zorbax Eclipse Plus C18 Analytical column ~ 1000 injections (100 x 4,6 mm - 3,5 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs



Test solution	
RT (min)	**Analyte**
3.6	*t, t Muconic acid (t,t Muc)*
6.7	*IS*

N°	Code	HPLC	Packaging
		INSIGHTS S-Phenylmercapturic Acid (S-PMA) is a urinary metabolite of Benzene, deriving from the conjugation of the Benzene-Epoxide intermediate with Glutathione. The S-PMA metabolite was recently put on the list of biological indicators for Benzene exposure.	
67	**Z23110**	**S-phenylmercapturic Acid in urine by Fluorimetry - FAST** **(Extractive Method)** Attention: This test needs a binary gradient pump!	**1 x 100 tests**
	Z23121	S-phenylmercapturic Acid in urine - FAST - Mobile Phase M1	4 x 500 ml
	Z23131	S-phenylmercapturic Acid in urine - FAST - Mobile Phase M2	4 x 500 ml
	Z23116	Calibrator for S-phenylmercapturic Acid in urine	4 x 10 ml
	Z38019	Multiparametric Control for Toxic Organic Compounds in urine - Levels 1 and 2 (1-Hydroxypyrene, 1,2-Cyclohexanediol, Hippuric Acid, Mandelic Acid, Phenylglyoxylic Aci, S-phenylmercapturic Acid, t,t-Muconic Acid, Total Methylhippuric Acids, Trichloroacetic Acid)	2 x 5 x 10 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
		INSIGHTS MEK, also known as methyl ethyl ketone or butanone, occurs as a colorless liquid with a sweet smell like acetone. Is is volatile, flammable and potentially explosive. It is mainly used as a solvent, and for this reason it is used in processes involving rubbers, resins, nitrocellulose coatings, cellulose acetate and vinyl films. MEK is absorbed through the skin and through inhalation. It causes irritation to the nose and throat at concentrations close to 100 ppm, and eyes at 200 ppm. Facial dermatitis is reported at concentrations of between 300 and 600 ppm; at higher concentrations it can cause narcosis. In literature it is also described as a possible cause of optic neuritis due probably to its transformation into methanol. The half life of exhaled MEK is approximately 60 minutes and in blood is about 4 hours. Although it is metabolized in the body, it is also found unchanged in the urine.	
68	**Z24110**	**Methyl-Ethyl-Ketone in urine (MEK) by UV - FAST (Extractive Method)**	**1 x 100 tests**
	Z24111	Methyl-Ethyl-Ketone in urine (MEK) - FAST - Mobile Phase	4 x 500 ml
	Z24020	Liquid Calibrator for Methyl-Ethyl-Ketone (MEK) in urine	2 x 5 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs

N°	Code	HPLC	Packaging
		INSIGHTS 1-Hydroxypyrene is a metabolic product of polycyclic aromatic hydrocarbons (PAH) in human urine. The generic term PAH represents more than 200 aromatic compounds with condensed ring systems. Just as a large number of PAHs have been shown to be highly carcinogenic in animal experiments, exposure to PAH can be a serious danger to human organism as well. Intake of PAHs may occur primarily in the lungs and the gastro-intestinal tract or through the skin as a secondary route. 1 – Hydroxypyrene is excreted in urine conjugated with glucuronic acid and with sulfate. To free it for analysis, the sample is hydrolyzed with β-glucuronidase arilsulfatase for 16 h at 37 °C at pH=5.0. Among PAH metabolites 1-hydroxypyrene is the most important biomarker for the evaluation of occupational related PAH exposure.	
69	**Z38210**	**1-Hydroxypyrene in urine by Fluorimetry - FAST (Extractive Method)**	**1 x 100 tests**
70	**Z38215**	**1-Hydroxypyrene in urine by Fluorimetry - FAST (Extractive Method)**	**1 x 500 tests**
	Z38211	1-Hydroxypyrene in urine - FAST - Mobile Phase	4 x 500 ml
	Z38016	Calibrator for 1-Hydroxypyrene in urine	4 x 10 ml
	Z38019	Multiparametric Control for Toxic Organic Compounds in urine - Levels 1 and 2 (1-Hydroxypyrene, 1,2-Cyclohexanediol, Hippuric Acid, Mandelic Acid, Phenylglyoxylic Aci, S-phenylmercapturic Acid, t,t-Muconic Acid, Total Methylhippuric Acids, Trichloroacetic Acid)	2 x 5 x 10 ml
	Z959961902	Zorbax Eclipse Plus C18 Analytical column ~ 1000 injections (100 x 4,6 mm - 3,5 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs



Urine calibrator	
RT (min)	**Analyte**
3.9	*IS*
5.9	*1-Hydroxypyrene*

N°	Code	HPLC	Packaging
		INSIGHTS Phenol is used in numerous organic synthesis and disinfectants. It is toxic by itself if absorbed through the skin, respiratory system or, accidentally, through the digestive system. In the organism, Phenol, is partially conjugated with Sulfuric Acid and Glucuronic Acid. Phenol is irritant to mucous, eyes and skin. O-Cresol is a urinary metabolite of Toluene, a substance used in the production of commonly used materials (glues, paints, lacquers, ink etc.) and it is present also as a micro pollutant in the environment. Thus all the population is exposed to modest concentrations of Toluene. 20% of the absorbed amount is expelled unmodified by the respiratory system and the remainder is biologically transformed. The main metabolites are Hippuric Acid, O-Cresol and Benzoic Acid.	
71	**Z55310**	**o-Cresol and Phenol in urine by Fluorimetry - FAST**	**1 x 100 tests**
72	**Z55315**	**o-Cresol and Phenol in urine by Fluorimetry - FAST**	**1 x 500 tests**
	Z55311	o-Cresol and Phenol in urine - FAST - Mobile Phase	4 x 500 ml
	Z55016	Calibrator for o-Cresol and Phenol in urine	4 x 1 ml
	Z55019	Control for o-Cresol and Phenol in urine - Levels 1 and 2	2 x 5 x 1 ml
	Z699975408	Poroshell 120 PFP Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
	UNIQUE	INSIGHTS The determination of Zinc Protoporphyrin (ZPP-WB) is used as a diagnostic test for lead poisoning which inhibits the activity of the enzyme heme-synthetase thus increasing the concentration of Protoporphyrin (PP) in the blood. Protoporphyrin binds to Zinc to form Zinc Protoporphyrin. Zinc Protoporphyrin is formed as a metabolite in the presence of high concentrations of lead because it interferes with ferrochelatase in the bond between Iron and PP.	
73	**Z39110**	**Free Eritrocitary Protoporphyrin IX (PPIX) and Zinc Protoporphyrin (ZnPP) in whole blood by Fluorimetry - FAST**	**1 x 100 tests**
	Z39111	Free Eritrocitary PPIX and ZnPP in whole blood - FAST - Mobile Phase	4 x 500 ml
	Z39016	Calibrator for PPIX and Znpp in whole blood	1 x 2 x 0,5 ml/ 4 x 1ml
	Z39019	Control for PPIX and Znpp in whole blood - Levels 1 and 2	1 x 4 x 0,5 ml/ 10 x 1 ml
	Z699975902	Poroshell 120, EC-C18 Analytical column ~ 1000 injections (50 x 4,6 mm - 2,7 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs

FORENSIC TOXICOLOGY

N°	Code	HPLC	Packaging

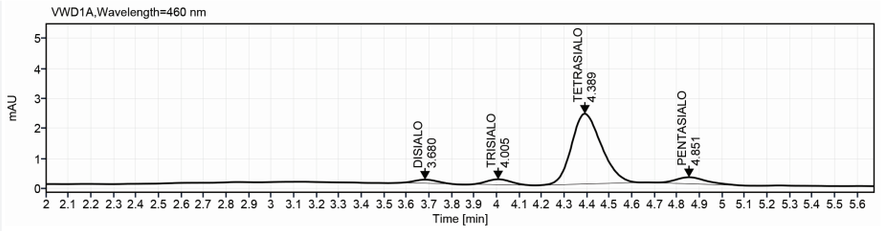
CHRONIC ALCOHOL ABUSE

INSIGHTS

At the end of the 1970s it was demonstrated that there was a correlation between excessive alcohol consumption and increased concentrations of transferrin at low glycosylation levels (CDT). Thus CDT is a marker of chronic alcohol abuse. Both asialo and disialo transferrin are clearly correlated to chronic alcohol consumption, even though showing different grades of sensitivity and specificity. However the IFCC group has identified disialotransferrin as the target analyte for CDT.

74	Z68210	**CDT test in serum by UV/VIS - FAST - Monoreagent** Binary gradient pump necessary!	1 x 100 tests
75	Z68215	**CDT test in serum by UV/VIS - FAST - Monoreagent** Binary gradient pump necessary!	1 x 500 tests

Z68611	CDT Test in serum - FAST - Mobile Phase M1	4 x 500 ml
Z68711	CDT Test in serum - FAST - Mobile Phase M2	4 x 500 ml
Z68811	CDT Test in serum - FAST - Mobile Phase M3	4 x 500 ml
Z68019	Control for CDT Test in serum - Levels 1 and 2	2 x 5 x 1 ml
Z054998	SAX 10 G Analytical column ~ 1000 injections (50 x 4 mm - 5 µm)	1 Pc
S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs



Serum control (level 2)	
RT (min)	**Analyte**
3.7	*Disialotransferrin*
4.0	*Trisialotransferrin*
4.4	*Tetrasialotransferrin*
4.9	*Pentasialotransferrin*

GC-GC/MS

SPECIAL CLINICAL CHEMISTRY

N°	Code	GC-GC/MS	Packaging

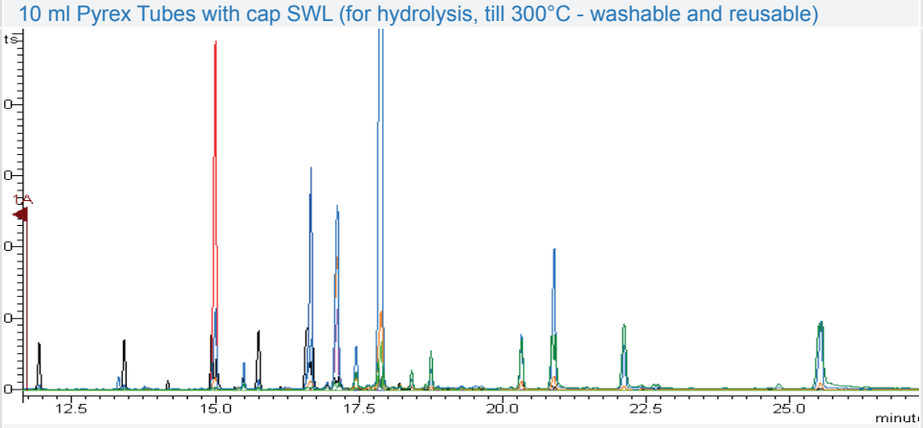
METABOLIC DISORDERS

INSIGHTS

Fatty acids are biosynthesized in the human body from dietary fat, fat storage or endogenous lipids. Some polyunsaturated fatty acids cannot be biosynthesized through metabolic processes and need to be engaged under the diet. In order to prevent obesity and related metabolic disorders, as well as atherosclerotic and thromboembolic diseases it is necessary to analyze, quantify and monitor the concentration of long chain fatty acids in the plasma matrix. There are several studies linking high levels of polyunsaturated fatty acids omega-3 longchain (EPA and DHA) to a reduced risk of developing cardiovascular disease, the main cause of death in the world.

76	GC75010	**Differentiated Fatty Acids in plasma by detector MS** alfa-Linolenic Acid C18:3(omega 3), Arachidonic Acid C20:4(omega 6), DHA C22:6(omega 3), di-homogammalinolenic Acid C20:3(omega 6), Elaidic Acid C18:1-trans(omega 9), EPA C20:5(omega 3), gamma-Linolenic Acid C18:3(omega 6), Linoleaidic Acid C18:2-trans(omega 6), Linoleic Acid C18:2-cis (omega 6), Myristic Acid C14:0 , Oleic Acid C18:1-cis(omega 9), Palmitic Acid C16:0, Palmitoleic Acid C16:1(omega 7), Stearic Acid C18:0	**1 x 100 tests**

GC75016	Calibrator for Differentiated Fatty Acids in plasma alfa-Linolenic Acid C18:3(omega 3), Arachidonic Acid C20:4(omega 6), DHA C22:6(omega 3), di-homogammalinolenic Acid C20:3(omega 6), Elaidic Acid C18:1-trans(omega 9), EPA C20:5(omega 3), gamma-Linolenic Acid C18:3(omega 6), Linoleaidic Acid C18:2-trans(omega 6), Linoleic Acid C18:2-cis (omega 6), Myristic Acid C14:0 , Oleic Acid C18:1-cis(omega 9), Palmitic Acid C16:0, Palmitoleic Acid C16:1(omega 7), Stearic Acid C18:0	4 x 1 ml
GC75019	Control for Differentiated Fatty Acids in plasma - Levels 1 and 2 alfa-Linolenic Acid C18:3(omega 3), Arachidonic Acid C20:4(omega 6), DHA C22:6(omega 3), di-homogammalinolenic Acid C20:3(omega 6), Elaidic Acid C18:1-trans(omega 9), EPA C20:5(omega 3), gamma-Linolenic Acid C18:3(omega 6), Linoleaidic Acid C18:2-trans(omega 6), Linoleic Acid C18:2-cis (omega 6), Myristic Acid C14:0 , Oleic Acid C18:1-cis(omega 9), Palmitic Acid C16:0, Palmitoleic Acid C16:1(omega 7), Stearic Acid C18:0	2 x 5 x 1 ml
S11288A7	Durabond HP-88 Analytical column ~ 1000 injections (100 m x 0,25 mm - 0,2 µm)	1 Pc
S29004U	Amber Glass Vials of 2 ml	1 x 100 Pcs
S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs



Plasma Calibrator

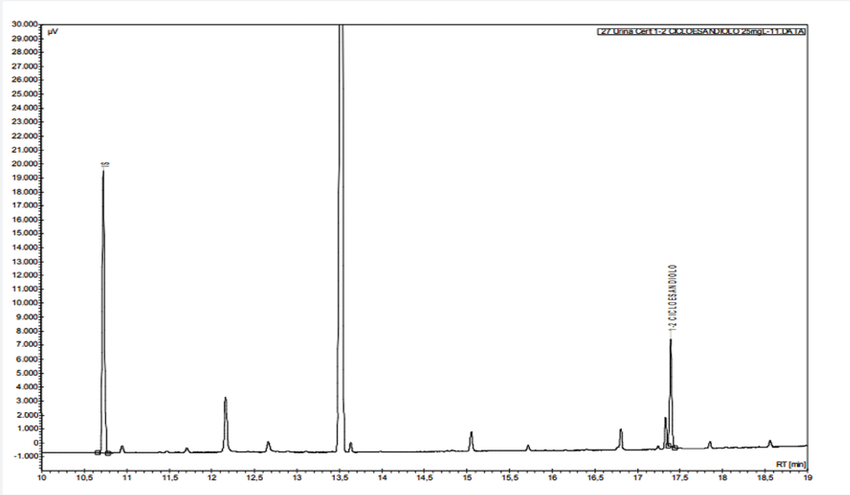
RT (min)	Analyte	RT (min)	Analyte
13.8	*Myristic Acid*	18.3	*Linoleic Acid (ω6)*
15.4	*Palmitic Acid*	18.9	*γ-Linoleic Acid (ω6)*
15.9	*Palmitoleic Acid (ω7)*	19.2	*α-Linoleic Acid (ω3)*
16.2	*IS*	20.9	*Dihomo-γ-linoleic Acid (ω6)*
17.1	*Stearic Acid*	21.5	*Arachidonic Acid (ω6)*
17.4	*Elaidic Acid(trans)*	22.7	*All cis 5,8,11,14,17 Eicosapentaenoic Acid (EPA ω3)*
17.6	*Oleic Acid*	26.3	*All cis 4,7,10,13,16,19 Docosahexenoic Acid (DHA ω3)*
17.8	*Linolelaidic Acid(trans,trans)*		

OCCUPATIONAL TOXICOLOGY

N°	Code	GC-GC/MS	Packaging
		INSIGHTS Isobutyl Acetate is commonly used as solvent in lacquers and in nitrocellulose. It is an extremely flammable liquid.	
77	**GC01010**	**Butyl Acetate in urine by detector FID and MS**	**1 x 100 tests**
	GC01020	Liquid Calibrator for Butyl Acetate in urine	1 x 2 ml
	ZRE13870	Rxi-624 SilMS capillary column ~ 1000 injections (30 m x 0,32 mm - 1,8 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24563	Syringe of 100 µl for liquid and gas injection, 1710 N with interchangeable pyston	1 Pc
		INSIGHTS Ethyl acetate, at room temperature, appears as a volatile, colorless liquid with a pleasant fruity odor; it is a very flammable and irritating compound. It is widely used as a solvent for paints, resins and glues as it is relatively less toxic than other chlorinated solvents.	
78	**GC01510**	**Ethyl Acetate in urine by detector FID and MS**	**1 x 100 tests**
	GC01520	Liquid Calibrator for Ethyl Acetate in urine	1 x 2 ml
	ZRE13870	Rxi-624 SilMS capillary column ~ 1000 injections (30 m x 0,32 mm - 1,8 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24563	Syringe of 100 µl for liquid and gas injection, 1710 N with interchangeable pyston	1 Pc
		INSIGHTS Isobutyl Acetate is commonly used as solvent in lacquers and in nitrocellulose. It is an extremely flammable liquid.	
79	**GC02010**	**Isobutyl Acetate in urine by detector FID and MS**	**1 x 100 tests**
	GC02020	Liquid Calibrator for Isobutyl Acetate in urine	1 x 2 ml
	ZRE13870	Rxi-624 SilMS capillary column ~ 1000 injections (30 m x 0,32 mm - 1,8 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24563	Syringe of 100 µl for liquid and gas injection, 1710 N with interchangeable pyston	1 Pc
		INSIGHTS Methyl Acetate, at room temperature, is a volatile and colourless liquid, with a fruity odor. It is a very flammable and irritating compound. It is largely used as solvent for paints, resins and glues, being relatively less toxic than other Chlorine solvents.	
80	**GC02510**	**Methyl Acetate in urine by detector FID and MS**	**1 x 100 tests**
	GC02520	Liquid Calibrator for Methyl Acetate in urine	1 x 2 ml
	ZRE13870	Rxi-624 SilMS capillary column ~ 1000 injections (30 m x 0,32 mm - 1,8 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24563	Syringe of 100 µl for liquid and gas injection, 1710 N with interchangeable pyston	1 Pc
		INSIGHTS Butyl alcohol is a colourless liquid with an alcohol-like smell at room temperature. It is a flammable compound, dangerous, irritating and mixable with the most common organic solvents and almost totally mixable with water. It is used as a solvent in the production of paints and prevents opacification of transparent paint when drying in a wet environment. It is also used as an intermediate in the synthesis of ethers and esters, in which reactions it is also a solvent. It is also a solvent for glazes and paints, an additive in solvents used for industrial cleanings, additive for fuels etc.	
81	**GC05510**	**Butyl Alcohol in urine by detector FID**	**1 x 100 tests**
	GC05520	Liquid Calibrator for Butyl Alcohol in urine	1 x 2 ml
	ZRE13870	Rxi-624 SilMS capillary column ~ 1000 injections (30 m x 0,32 mm - 1,8 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24563	Syringe of 100 µl for liquid and gas injection, 1710 N with interchangeable pyston	1 Pc

N°	Code	GC-GC/MS	Packaging
		INSIGHTS Isobutyl Alcohol is a colourless liquid with an alcohol-like smell at room temperature. It is a flammable and irritant compound. It is mostly used as a solvent and intermediate in the synthesis of other substances.	
82	**GC06010**	**Isobutyl Alcohol in urine by detector FID**	**1 x 100 tests**
	GC05620	Liquid Calibrator for Isobutyl Alcohol in urine	1 x 2 ml
	ZRE13870	Rxi-624 SilMS capillary column ~ 1000 injections (30 m x 0,32 mm - 1,8 µm)	1 Pc
	S29057U	Standard glass vials of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24563	Syringe of 100 µl for liquid and gas injection, 1710 N with interchangeable pyston	1 Pc
		INSIGHTS Propyl Alcohol is a colourless liquid with an alcohol-like smell at room temperature. It is a very flammable and irritant compound used in the pharmaceutical industry and in the preparation of resins and in cellulose esters. It is found in nature in small quantities in many fermentation processes.	
83	**GC06510**	**Propyl Alcohol in urine by detector FID**	**1 x 100 tests**
	GC06520	Liquid Calibrator for Propyl Alcohol in urine	1 x 2 ml
	ZRE13870	Rxi-624 SilMS capillary column ~ 1000 injections (30 m x 0,32 mm - 1,8 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24563	Syringe of 100 µl for liquid and gas injection, 1710 N with interchangeable pyston	1 Pc
		INSIGHTS Isopropyl Alcohol, also called Isopropanol or 2-Propanol, is a colourless liquid with a very characteristic odor. It is widely used as a detergent, solvent, an additive in industries and printing, or as an intermediate in pharmaceutical and cosmetic industries. It is also used as an additive for fuels, car radiator liquid and disinfectant.	
84	**GC07010**	**Isopropyl Alcohol in urine by detector FID**	**1 x 100 test**
	GC06620	Liquid Calibrator for Isopropyl Alcohol	1 x 2 ml
	ZRE13870	Rxi-624 SilMS capillary column ~ 1000 injections (30 m x 0,32 mm - 1,8 µm)	1 Pc
	S29057U	Standard Glass Vial of 2ml with Screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24563	Syringe of 100 µl for liquid and gas injection, 1710 N with interchangeable pyston	1 Pc
		INSIGHTS Methyl-Isobutyl-Ketone is a colorless and flammable liquid used in the laboratory as an organic solvent and in industries as a solvent for paints, glues tinctures etc. Exposure happens commonly through the respiratory system and to a lesser degree through the skin, therefore it can result irritate the mucous and skin. Exposure to high concentrations can cause vertigo, nausea and vomit that are rapidly reversible after exposure has ceased.	
85	**GC10510**	**Methylisobutylketone in urine by detector MS-head space**	**1 x 100 tests**
	GC10520	Liquid Calibrator for Methylisobutylketone in urine	1 x 2 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S51834475	Glass vials 10 ml for headspace (need the crimper)	1 x 100 Pcs
	S80100165	Magnetic caps with teflon and sylicon septa for headspace vials (need the crimper)	1 x 100 Pcs
	S50404669	New Easy Grip Manual Crimper for 20 mm	1 Pc
	S50404671	New Easy Grip Manual Decapper for 20 mm crimper top vials	1 Pc
	ZRE24563	Syringe of 100 µl for liquid and gas injection, 1710 N with interchangeable pyston	1 Pc

N°	Code	GC-GC/MS	Packaging
		INSIGHTS Diethyl-ketone is a colourless liquid used in the laboratory as an organic solvent and in industries as a solvent for paints, glues, tinctures, etc. Absorption of this compound usually happens through the respiratory system and in a minority of cases through the skin and therefore can be irritating to mucous and skin. Its toxic power in the system is very limited. Elevated exposure can cause vertigo, nausea, vomit which are extremely reversible after the exposure has ceased.	
86	**GC11010**	**Diethylketone in urine by detector MS-head space**	**1 x 100 tests**
	GC11020	Liquid Calibrator for Diethylketone in urine	1 x 2 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S51834475	Glass vials 10 ml for headspace (need the crimper)	1 x 100 Pcs
	S80100165	Magnetic caps with teflon and sylicon septa for headspace vials (need the crimper)	1 x 100 Pcs
	S50404669	New Easy Grip Manual Crimper for 20 mm	1 Pc
	S50404671	New Easy Grip Manual Decapper for 20 mm crimper top vials	1 Pc
	ZRE24563	Syringe of 100 µl for liquid and gas injection, 1710 N with interchangeable pyston	1 Pc
		INSIGHTS Trans 1,2 Cyclohexanediol is one of the products (together with 1,4 Cyclohexanediol) of the metabolism of Cyclohexane and it is present both in free form and conjugated form (circa 70%) in urine of individuals exposed to Cyclohexane but also Cyclohexanol and Cyclohexanone. In research conducted on individuals exposed to Cyclohexane, the various urinary metabolites were present in the following proportions: Cyclohexanol 0.5%, 1,2 Cyclohexanediol 23.4%, 1,4 Cyclohexanediol 11.3%. The same pattern is found following exposure to Cyclohexanol and Cyclohexanone.	
87	**GC19310**	**trans-1,2-Cyclohexanediol in urine by detector FID and MS**	**1 x 100 tests**
		Mechanical Rotator recommended	
	Z19316	Calibrator for trans-1,2-Cyclohexanediol in urine	4 x 10 ml
	Z38019	Multiparametric Control for Toxic Organic Compounds in urine - Levels 1 and 2 (Hippuric Acid, 1-Hydroxypyrene, 1,2-Cyclohexanediol, Total Methylhippuric Acids, Mandelic Acid, t,t-Muconic Acid, Trichloroacetic Acid, S-phenylmercapturic Acid, Phenylglyoxylic Acid)	5 x 2 x 10 ml
	SCP9205	VF-WAX MS Column (30 m x 0,25 mm)	1 Pc
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs



Urine calibrator	
RT (min)	**Analyte**
10.9	*IS*
17.6	*Trans 1,2 CYCLOHEXANEDIOL*

N°	Code	GC-GC/MS	Packaging
		INSIGHTS Tetrachloroethylene (or Perchloroethylene) is an organic halogen. At room temperature it is found as a colourless liquid with a chlorine smell. Non-flammable it is a harmful compound if inhaled and dangerous for the environment. Tetrachloroethylene is used in laundries for dry cleaning and degreasing, in clinical and pharmaceutical industries and for domestic use. Exposure to high concentrations of Tetrachloroethylene can cause damage to liver and kidneys.	
88	**GC15010**	**Tetrachloroethylene in urine by detector MS-head space**	**1 x 100 tests**
	GC15020	Liquid Calibrator for Tetrachloroethylene in urine	1 x 2 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S51834475	Glass vials 10 ml for headspace (need the crimper)	1 x 100 Pcs
	S80100165	Magnetic caps with teflon and sylicon septa for headspace vials (need the crimper)	1 x 100 Pcs
	S50404669	New Easy Grip Manual Crimper for 20 mm	1 Pc
	S50404671	New Easy Grip Manual Decapper for 20 mm crimper top vials	1 Pc
	ZRE24563	Syringe of 100 µl for liquid and gas injection, 1710 N with interchangeable pyston	1 Pc
		INSIGHTS Methyl-Chloroacetate is the methyl ester of Trichloroacetic Acid. The latter is a fumigant solvent used for dry cleaning and degreasing. It is absorbed through inhalation and through the skin causing, at high doses, skin irritation and a nephrotoxic effect. It is found in the urine of individuals professionally exposed to trichloroethylene and other chlorine solvents or in the urine of addicts which are used to sniffing solvents or in cases of voluntary/ involuntary ingestion of trichloroethylene or similar.	
89	**GC15510**	**Methyltrichloroacetate in urine by detector MS-head space**	**1 x 100 tests**
	GC15520	Liquid Calibrator for Methyltrichloroacetate in urine	1 x 2 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S51834475	Glass vials 10 ml for headspace (need the crimper)	1 x 100 Pcs
	S80100165	Magnetic caps with teflon and sylicon septa for headspace vials (need the crimper)	1 x 100 Pcs
	S50404669	New Easy Grip Manual Crimper for 20 mm	1 Pc
	S50404671	New Easy Grip Manual Decapper for 20 mm crimper top vials	1 Pc
	ZRE24563	Syringe of 100 µl for liquid and gas injection, 1710 N	1 Pc
		INSIGHTS Trichloroethane is an alkyl halide at room temperature, which is presented as a colorless, sweet smelling liquid. Trichloroethane is used in the metalworking industry as a cleaner and degreaser and in the removal of PVC waste from metals such as silver and copper. In the electronics industry it is used as a solvent of photoresist and as a co-solvent in the production of paints, inks, glues and adhesives. Trichloroethane is absorbed by inhalation and only 4% is metabolized via Cit. P-450 to Trichloroethanol and subsequently to trichloroacetic acid. 90% is exhaled. Trichloroethane affects the human central nervous system presenting the classic symptoms of intoxication such as vomiting, confusion, unconsciousness and in severe cases death.	
90	**GC16010**	**Trichloroethane in urine by detector MS-head space**	**1 x 100 tests**
	GC16020	Liquid Calibrator for Trichloroetane in urine	1 x 2 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S51834475	Glass vials 10 ml for headspace (need the crimper)	1 x 100 Pcs
	S80100165	Magnetic caps with teflon and sylicon septa for headspace vials (need the crimper)	1 x 100 Pcs
	S50404669	New Easy Grip Manual Crimper for 20 mm	1 Pc
	S50404671	New Easy Grip Manual Decapper for 20 mm crimper top vials	1 Pc
	ZRE24533	Syringe of 50 µl 705 N Syr (22S/51/2)	1 Pc

N°	Code	GC-GC/MS	Packaging
		INSIGHTS Trichloroethylene is used as a degreaser for metals, in the preparation of paints and to clean textiles. It is absorbed through inhalation and skin and it is deposited principally in lipidic tissues. It is mostly expelled through urine. 8% is expelled through exhalation. Exposure to high concentrations of Trichloroethylene causes sight problems, confusion, nausea and vomiting. Chronic exposure hits the central nervous system causing anxiety, headaches and vertigo.	
91	**GC16110**	**Trichloroethylene in urine by detector MS-head space**	**1 x 100 tests**
	GC16120	Liquid Calibrator for Trichloroethylene in urine	1 x 2 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S51834475	Glass vials 10 ml for headspace (need the crimper)	1 x 100 Pcs
	S80100165	Magnetic caps with teflon and sylicon septa for headspace vials (need the crimper)	1 x 100 Pcs
	S50404669	New Easy Grip Manual Crimper for 20 mm	1 Pc
	S50404671	New Easy Grip Manual Decapper for 20 mm crimper top vials	1 Pc
	ZRE24563	Syringe of 100 µl for liquid and gas injection, 1710 N	1 Pc
		INSIGHTS Trichloroethanol (TCE), and Trichloroacetic Acid (TCA) are the principal metabolites of Trichloroethylene and Perchloroethylene. Trichloroethylene is used as a degreaser for metals, in the preparations of paints and to clean textiles. It is absorbed through inhalation and skin and it is deposited principally in lipidic tissues. It is mostly expelled through urine. 8% is expelled through exhalation. Exposure to high concentrations of Trichloroethylene causes sight problems, confusion, nausea and vomiting. Chronic exposure hits the central nervous system causing anxiety, headaches and vertigo.	
92	**GC16510**	**Trichloroethanol in urine by detector MS**	**1 x 100 tests**
	GC16520	Liquid Calibrator for Trichloroethanol in urine	1 x 2 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	ZRE24533	Syringe of 50 µl 705 N Syr (22S/51/2)	1 Pc

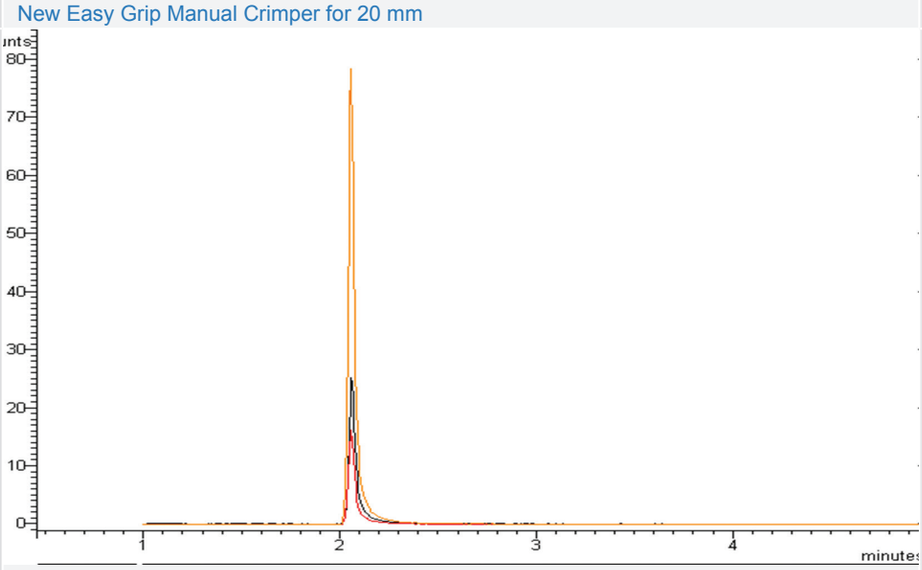
N°	Code	GC-GC/MS	Packaging

INSIGHTS

Trichloroacetic Acid (TCA) is the most significant urinary metabolite of Trichloroethylene. It is a fumigant solvent used for dry cleaning and degreasing. It can be inhaled or absorbed through the skin and at high doses produces cutaneous irritation and a nephrotoxic effect.It is present in the urine of individuals professionally exposed to trichlorethylene vapour and other chlorinated solvents or in the urine of drug users who regularly snort solvents or in cases of voluntary or accidental ingestion of trichlorethylene or its derivatives. Analytical determination is based on the Fujiwara reaction that develops a red colour by reacting trichloroacetic acid with pyridine in an alcaline environment, however this methodology is aspecific. The proposed method determines trichloroacetic acid, after decarboxylation, injecting a urinary sample previously treated in theappropriate solvent into GC-MS or GC-ECD/head space.

93	**GC17010**	**Trichloroacetic Acid in urine by detector ECD and MS-head space**	**1 x 100 tests**

Z17016	Calibrator for Trichloroacetic Acid in urine	4 x 1 ml
Z38019	Multiparametric Control for Toxic Organic Compounds in urine - Levels 1 and 2 (1-Hydroxypyrene, 1,2-Cyclohexanediol, Hippuric Acid, Mandelic Acid, Phenylglyoxylic Aci, S-phenylmercapturic Acid, t,t-Muconic Acid, Total Methylhippuric Acids, Trichloroacetic Acid)	2 x 5 x 10 ml
SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
S51834475	Glass vials 10 ml for headspace (need the crimper)	1 x 100 Pcs
S80100165	Magnetic caps with teflon and sylicon septa for headspace vials (need the crimper)	1 x 100 Pcs
S50404669	New Easy Grip Manual Crimper for 20 mm	1 Pc



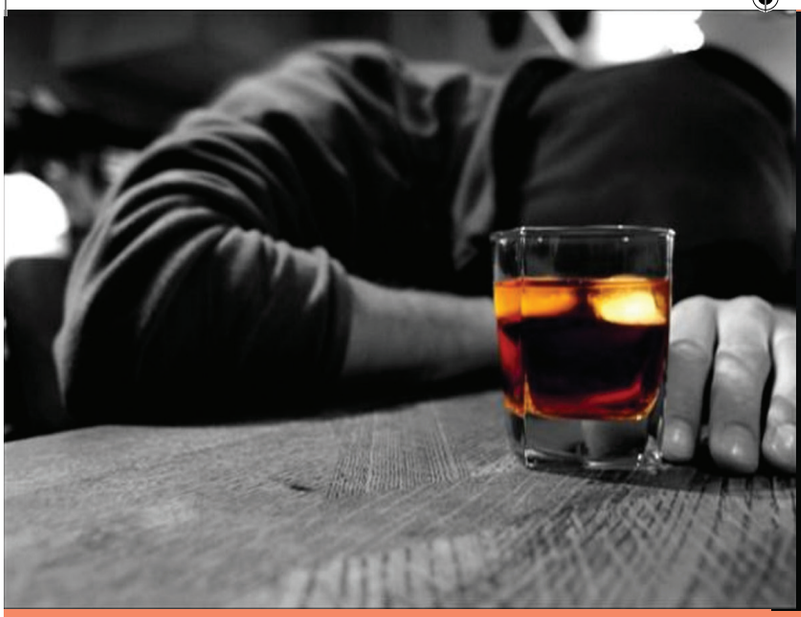
Urine calibrator	
RT (min)	**Analyte**
2.2	*TCA*

N°	Code	GC-GC/MS	Packaging
		INSIGHTS Carbon Tetrachloride (or Tetrachloromethane) (CCl4) also known as freon 10, is a synthetic compound used in laboratories, as a solvent in agriculture, as pesticide and in industries as a chemical intermediate in the production of fluorocarbons and for metal cleaning. At room temperature it is a non-polar liquid, volatile and very toxic because it's able to start radical chain reactions degrading cellular membranes.	
94	**GC17510**	**Carbon Tetrachloride in urine by detector MS-head space**	**1 x 100 tests**
	GC17520	Liquid Calibrator for Carbon Tetrachloride in urine	1 x 2 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S51834475	Glass vials 10 ml for headspace (need the crimper)	1 x 100 Pcs
	S80100165	Magnetic caps with teflon and sylicon septa for headspace vials (need the crimper)	1 x 100 Pcs
	S50404669	New Easy Grip Manual Crimper for 20 mm	1 Pc
	S50404671	New Easy Grip Manual Decapper for 20 mm crimper top vials	1 Pc
	ZRE24563	Syringe of 100 µl for liquid and gas injection, 1710 N with interchangeable pyston	1 Pc
		INSIGHTS Dichloromethane (or methylene chloride) is a chemical compound belonging to the family of alkyl halides. Due to its volatility it is easily absorbed through the lungs; absorption through the skin is not significant. Circa 40% of Dichloromethane is metabolized; the rest is expelled unmodified through exhaling and partially through urine. Its volatility and ability to dissolve many organic compounds makes Dichloromethane an ideal solvent for many chemical processes. It is largely used to remove lipids and paints. It has been classified as potentially carcinogenic.	
95	**GC18010**	**Methylene Chloride (Dichloromethane) in urine by detector MS-head space**	**1 x 100 tests**
	GC18020	Liquid Calibrator for Methylene Chloride in urine	1 x 2 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S51834475	Glass vials 10 ml for headspace (need the crimper)	1 x 100 Pcs
	S80100165	Magnetic caps with teflon and sylicon septa for headspace vials (need the crimper)	1 x 100 Pcs
	S50404669	New Easy Grip Manual Crimper for 20 mm	1 Pc
	S50404671	New Easy Grip Manual Decapper for 20 mm crimper top vials	1 Pc
	ZRE24563	Syringe of 100 µl for liquid and gas injection, 1710 N with interchangeable pyston	1 Pc

N°	Code	GC-GC/MS	Packaging
		INSIGHTS Methanol is used in the production of cellulose, synthetic resins, formaldehyde, acetic acid and fuel. Methanol is distributed uniformly in tissues and blood; it is metabolized in the liver and excreted in urine as Formaldehyde, Formic Acid and CO2. The major toxicity of methanol is not due to the molecule but to metabolite, Formic Acid. Alcohol dehydrogenase is the first metabolic pathway that oxidizes Methanol into Formaldehyde. The subsequent oxidation of Formaldehyde to Formic Acid takes place through aldehyde dehydrogenase, an extremely fast reaction. After 6-18 hours from the time of exposure visual disturbances (pupillar oedema) and metabolic acidosis are observed: they are caused mainly by Formic Acid which is also the main cause of optic neuritis. The dosage of methanol is only useful if it's done early, while the determination of formates is more useful and can be used as an index of the intoxication's severity.	
96	**GC74010**	**Formic Acid in urine by detector MS-head space**	**1 x 100 tests**
	GC74020	Liquid Calibrator for Formic Acid in urine	1 x 2 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S51834475	Glass vials 10 ml for headspace (need the crimper)	1 x 100 Pcs
	S80100165	Magnetic caps with teflon and sylicon septa for headspace vials (need the crimper)	1 x 100 Pcs
	S50404669	New Easy Grip Manual Crimper for 20 mm	1 Pc
	S50404671	New Easy Grip Manual Decapper for 20 mm crimper top vials	1 Pc
	ZRE24563	Syringe of 100 µl for liquid and gas injection, 1710 N with interchangeable pyston	1 Pc
	UPGRADE	Detection of 3 additional analytes: **Cyclohexane, Cyclohexanol, Chloroform** and addition of 2 internal standards: 2-Methyl 1-Butanol and Benzene fluoride	
97	**GC77010**	**Volatile organic compounds (VOC) in urine by GC/MS - headspace** (Acetone, Benzene, Cyclohexane, Cyclohexanol, Chloroform, Dichloromethane, Ethanol, Isopropanol, Methanol, Methylethylketone (MEK), Methylisobuthylketone (MIBK), Styrene, Toluene, o-m-p-Xylene)	**1 x 100 tests**
98	**GC77015**	**Volatile organic compounds (VOC) in urine by GC/MS- headspace** (Acetone, Benzene, Cyclohexane, Cyclohexanol, Chloroform, Dichloromethane, Ethanol, Isopropanol, Methanol, Methylethylketone (MEK), Methylisobuthylketone (MIBK), Styrene, Toluene, o-m-p-Xylene)	**1 x 500 tests**
		IFU	
	GC77016	Calibrator for VOC (Acetone, Benzene, Cyclohexane, Cyclohexanol, Chloroform, Dichloromethane, Ethanol, Isopropanol, Methanol, Methylethylketone, Methylisobuthylketone, Styrene, Toluene, o-m-p-Xylene)	7 x 2 x 10 ml
	GC77019	Control for VOC – Levels 1 and 2 (Acetone, Benzene, Cyclohexane, Cyclohexanol, Chloroform, Dichloromethane, Ethanol, Isopropanol, Methanol, Methylethylketone, Methylisobuthylketone, Styrene, Toluene, o-m-p-Xylene)	2 x 10 x 10 ml
	S1221364	J&W 122-1364 DB-624 Analytical Column ~1000 injections (60 x 0,25 mm –1,4 µm)	1 Pc
	STH99993188	Headspace clear vials of 20 ml + caps	1 x 100 Pcs
	S50404669	New Easy Grip Manual Crimper for 20 mm	1 Pc
	S50404671	New Easy Grip Manual Decapper for 20 mm Crimper Top vials	1 Pc

N°	Code	CG-GC/MS	Packaging
	NEW		
99	GC77110	**Volatile Organic Compounds (VOC) in whole blood by GC/MS head space** (Acetone, Benzene, Ethanol, Methanol, Methylene Chloride, Perchlorethylene, Toluene)	1 x 100 tests
100	GC77115	**Volatile Organic Compounds (VOC) in whole blood by GC/MS head space** (Acetone, Benzene, Ethanol, Methanol, Methylene Chloride, Perchlorethylene, Toluene)	1 x 500 tests
	GC77116	Calibrator for VOC in whole blood (Acetone, Benzene, Ethanol, Methanol, Methylene Chloride, Perchlorethylene, Toluene)	7 x 2 x 10 ml
	GC77119	Control for VOC in whole blood - Levels 1 and 2 (Acetone, Benzene, Ethanol, Methanol, Methylene Chloride, Perchlorethylene, Toluene)	2 x 10 x 10 ml
	S1221364	J&W 122-1364 DB-624 Analytical Column ~1000 injections (60 x 0,25mm –1,4 µm)	1 pc
	STH99993188	Headspace clear vials of 20 ml + caps	1 x 100 pcs
	S50404669	New Easy Grip Manual Crimper for 20 mm	1 pc
	S50404671	New Easy Grip Manual Decapper for 20 mm crimper top vials	1 pc
	NEW	INSIGHTS N,N-Dimethylformamide (DMF) and N,N-Dimethylacetamide (DMA) are solvents and often used in the production of polymers. These substances can be absorbed through the skin and inhaled. Their metabolites are excreted in urine Biological monitoring is needed for workers exposed to DMF and DMA by determining their metabolites N-methylformamide (NMF) and N-methylacetamide (NMA) in urine, respectively.	
101	GC99010	**N-Methylacetamide and N-MethylFormamide in urine by GC/MS**	1 x 100 tests
	GC99016	Calibrator for N-Methylacetamide and N-MethylFormamide in urine	6 x 10 ml/ 5 x 1 x 0,3 ml
	GC99019	Control for N-Methylacetamide and N-MethylFormamide in urine - Levels 1 and 2	2 x 10 ml/ 2 x 1 x 0,3 ml
	STH260X296P	TR WAX MS GC Column (30 m x 0.25mm - 1 µm)	1 pc
	S29057U	Standard glass Vial of 2 ml with screw cap	1 x 100 pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 pcs
	Z1636/26	10 ml Pirex Tubes with cap SWL (for hidrolysis, till 300 °C-washable and reusable)	1 x 40 pcs

N°	Code	GC-GC/MS	Packaging
	NEW	INSIGHTS Monitoring acrylonitrile and other substances such as butyl acetate, ethyl acetate, heptane, isobutyl acetate, tetrahydrofuran in urine is highly important for human health because of their toxicity. For example, n-Butyl Acetate is a colourless liquid with a fruity odor. It is widely used for several purposes, for instance in photographic films, nail polish removers, lacquers, perfumes, oil, and resin. It is on special health hazard substance list. The National Institute for Occupational Safety and Health (NIOSH) defines acrylonitrile as a toxic, colorless to pale-yellow liquid, harmful to the eyes, skin, lungs, and nervous system.	
102	**GC30010**	**Acetates in urine by GC/MS head space** (Acrylonitrile, Butyl Acetate, Ethyl Acetate, Heptane, Isobutyl Acetate, Tetrahydrofuran)	**1 x 100 tests**
	GC30016	Calibrator for Acetates in urine (Acrylonitrile, Butyl Acetate, Ethyl Acetate, Heptane, Isobutyl Acetate, Tetrahydrofuran)	5 x 2 x 10 ml
	GC30019	Control for Acetates in urine - Levels 1 and 2 (Acrylonitrile, Butyl Acetate, Ethyl Acetate, Heptane, Isobutyl Acetate, Tetrahydrofuran)	2 x 10 x 10 ml
	SCP8944	VF-5 MS Column ~1000 injections (30 m x 0.25mm ID DF=0,25 µm)	1 pc
	STH99993188	Headspace clear vials of 20 ml + caps	1 x 100 pcs
	S50404669	New Easy Grip Manual Crimper for 20 mm	1 pc
	S50404671	New Easy Grip Manual Decapper for 20 mm crimper top vials	1 pc



FORENSIC TOXICOLOGY

N°	Code	GC-GC/MS	Packaging
		DRUGS OF ABUSE IN URINE	
		INSIGHTS Synthetic psychoactive drugs acting on the Central Nervous System. Similar to Adrenaline (natural hormone produced by the organism in cases of stress, tension, physical stress or strong emotions). Amphetamines are found in pill form or capsules, granulated, gel or crystals. They are present in some pharmaceuticals used to reduce appetite or in antidepressants. Also used to lace Ecstasy, Cocaine or LSD.	
103	**GC43010**	**Amphetamines in urine by detector MS** **· CONFIRMATION KIT (Extractive Method)** (3,4-MDA, 3,4-MDE, 3,4-MDMA, Amphetamine, MBDB, Methamphetamine) An Evaporation System is necessary!	**1 x 50 tests**
	CC43016	Calibrator for Amphetamines in urine (3,4-MDA, 3,4-MDE, 3,4-MDMA, Amphetamine, Ephedrine, Ketamine, MBDB, Methamphetamine, Norpseudoephedrine, Pseudoephedrine)	5 x 2 x 5 ml
	GC43030	Internal Standard for Amphetamines	1 x 1 ml
	GC43040	Derivatization Solution 1 for Amphetamines	1 x 1 ml
	GC43050	Derivatization Solution 2 for Amphetamines	1 x 1 ml
	CC43019	Multiparametric Control for Drugs of Abuse in urine - Levels 1 and 2 (3,4-MDA, 3,4-MDE, 3,4-MDMA, Amphetamine, Benzoylecgonine, Cocaethylene, Ephedrine, Ketamine, MBDB, Methamphetamine, Methadone, Norpseudoephedrine, Pseudoephedrine)	2 x 6 x 5 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24533	Syringe of 50 µl 705 N Syr (22S/51/2)	1 Pc
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
		INSIGHTS Buprenorphine is an analgesic with a long-time action, 25 to 40 times more potent than morphine. It is used in many cases as a drug replacement therapy in the detoxification of heroin addicts with doses ranging from 0.2 to 2 mg. Since 1996, a high number of deaths have been observed as a result of taking buprenorphine, often associated with other psychotropic drugs. Buprenorphine is metabolized through N-dealkylation to norbuprenorphine, which is glucuronidated and excreted in urine. Determinative screening in biological fluids (especially urine) is usually performed using immunometric techniques using monoclonal antibodies and subsequent staining with various reagents. Because these techniques can not rule out false positives, the positive screening must be confirmed by alternative technology. This is usually done with gas chromatography (GC) or liquid chromatography (LC) coupled with both specific and selective detector (UV, Fluorescent, MS).	
104	**GC44010**	**Norbuprenorphine and Buprenorphine in urine by detector MS** **· CONFIRMATION KIT (Extractive Method)** An Evaporation System is necessary!	**1 x 50 tests**
	CC44016	Calibrator for Norbuprenorphine and Buprenorphine in urine	5 x 2 x 6 ml
	GC45030	Internal Standard for Opiates	1 x 1 ml
	GC45040	Derivatization Solution for Opiates	3 x 1 ml
	CC44019	Control for Norbuprenorphine and Buprenorphine in urine - Levels 1 and 2	2 x 6 x 6 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24533	Syringe of 50 µl 705 N Syr (22S/51/2)	1 Pc
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs

N°	Code	GC-GC/MS	Packaging
		INSIGHTS Heroin (Diacetylmorphine) is a semisynthetic substance of abuse obtained from Morphine, one of the principal opioid alkaloids, by reaction with acetic anhydride. Inside the organism, Heroin is rapidly hydrolyzed into 6-Monoacetylmorphine and then Morphine. The latter is then conjugated with Glucuronic Acid in positions 3 and 6, forming morphine-3-glucuronide and morphine-6-glucuronide. The last two are expelled in urine together with a small quantity of free Morphine. In opium,it is also possible to find small quantities of Codeine,and Acetylcodeine, obtained by acetylation of Codeine during the preparation of Heroin. The methods of 1° screening for the determination of opiates, through a reaction antigen-antibody, require a confirmatory analysis by chromatographic technique.This method by GC-MS allows to determine the total urinary morphine (after hydrolysis of the glucuronides), codeine, 6-monoacetylmorphine. Moreover, it also determines dihydrocodeine and ethylmorphine which are components of some pharmaceutical preparations. This is a remarkable feature because it allows to differentiate them from the other molecules contained in opium.	
105	GC45010	**Opiates in urine by detector MS** **· CONFIRMATION KIT (Extractive Method)** (Codeine, Dihydrocodeine, Ethylmorphine, 6-Monoacethylmorphine, Morphine) An Evaporation System is necessary!	**1 x 50 tests**
	CC45016	Calibrator for Opiates in urine (Codeine, Dihydrocodeine, Ethylmorphine, Morphine)	5 x 2 x 5 ml
	CC45116	Calibrator for 6-Monoacetylmorphine in urine	5 x 2 x 5 ml
	GC45030	Internal Standard for Opiates	1 x 1 ml
	GC45040	Derivatization Solution for Opiates	3 x 1 ml
	CC45019	Control for Opiates in urine - Levels 1 and 2 (Codeine, Dihydrocodeine, Ethylmorphine, Morphine)	2 x 6 x 5 ml
	CC48019	Control for EDDP, 6-Monoacetylmorphine and cocaine in urine - Levels 1 and 2	2 x 6 x 5 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24533	Syringe of 50 µl 705 N Syr (22S/51/2)	1 Pc
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
		INSIGHTS Cocaine, psycho-stimulating substance, is an alkaloid contained in coca leaves, produced by extraction with calcium hydroxide or ammonia. In the organism Cocaine is rapidly hydrolyzed to Benzoylecgonine. This metabolite is expelled in urine and its determination is proof of cocaine consumption. It is also possible to find the metabolite Cocaethylene in individuals abusing Cocaine or Alcohol.	
106	GC46010	**Benzoylecgonine-Cocaethylene-Cocaine in urine by detector MS** **· CONFIRMATION KIT (Extractive Method)** An Evaporation System is necessary!	**1 x 50 tests**
	CC46016	Calibrator for Benzoylecgonine and Cocaethylene in urine	5 x 2 x 5 ml
	CC46116	Calibrator for Cocaine in urine	5 x 2 x 5 ml
	GC46030	Internal Standard for Benzoylecgonine	1 x 1 ml
	GC46040	Derivatization Solution for Benzoylecgonine	3 x 1 ml
	CC43019	Multiparametric Control for Drugs of Abuse in urine - Levels 1 and 2 (3,4-MDA, 3,4-MDE, 3,4-MDMA, Amphetamine, Benzoylecgonine, Cocaethylene MBDB, Ephedrine, Ketamine, MBDB, Methamphetamine, Norpseudoephedrine, Pseudoephedrine)	2 x 6 x 5 ml
	CC48019	Control for EDDP, 6-Monoacetylmorphine and cocaine in urine - Levels 1 and 2	2 x 6 x 5 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24533	Syringe of 50 µl 705 N Syr (22S/51/2)	1 Pc
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs

N°	Code	GC-GC/MS	Packaging
		INSIGHTS Methadone is a synthetic opioid used as a drug of choice in the detoxification of heroin (and / or opiates). Methadone is metabolized in the body as 2-ethylidene-1,5-dimethyl-3,3- diphenylpyrrolidine (EDDP), metabolite that is found along with the parent drug in urine. Due to the presence of some substances that interfere with the antigen-antibody reaction, methods of 1° screening can give false positive results. Therefore, a confirmation analysis by chromatographic techniques is required. The following method is used to determine Methadone and EDDP, after solid phase extraction, by using gas chromatography - mass spectrometry.	
107	**GC48010**	**Methadone and EDDP in urine by detector MS · CONFIRMATION KIT (Extractive Method)** An Evaporation System is necessary!	**1 x 50 tests**
	CC48016	Calibrator for Methadone in urine	5 x 2 x 5 ml
	CC48116	Calibrator for EDDP in urine	5 x 2 x 5 ml
	GC45030	Internal Standard for Opiates	1 x 1 ml
	GC45040	Derivatization Solution for Opiates	3 x 1 ml
	CC43019	Multiparametric Control for Drugs of Abuse in urine - Levels 1 and 2 (3,4-MDA, 3,4-MDE, 3,4-MDMA, Amphetamine, Benzoylecgonine, Cocaethylene MBDB, Ephedrine, Ketamine, MBDB, Methamphetamine, Norpseudoephedrine, Pseudoephedrine)	2 x 6 x 5 ml
	CC48019	Control for EDDP, 6-Monoacetylmorphine and cocaine in urine - Levels 1 and 2	2 x 6 x 5 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24533	Syringe of 50 µl 705 N Syr (22S/51/2)	1 Pc
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
		INSIGHTS Delta-9-TetraCannabinol (commonly called THC, Delta-9-THC or Tetrahydrocannabinol) is one of the main and best known active principles of cannabis. It is a psychotropic substance produced by cannabis flowers, it can be ingested and most commonly smoked. It has pain-killing properties (sometimes used as treatment for pain), causes euphoria, anti-nausea, antiemetic, can stimulate appetites and reduce intraocular pressure and aggressiveness.	
108	**GC47010**	**Delta 9-tetrahydrocannabinol-COOH in urine by detector MS · CONFIRMATION KIT (Extractive Method)** An Evaporation System is necessary!	**1 x 50 tests**
	CC47016	Calibrator for Delta-9-THC-COOH in urine	5 x 2 x 10 ml
	GC47030	Internal Standard for THC	1 x 200 ul
	GC47040	Derivatization Solution for THC	3 x 1 ml
	CC47019	Control for Delta-9-THC-COOH in urine - Levels 1 and 2	2 x 6 x 10 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24533	Syringe of 50 µl 705 N Syr (22S/51/2)	1 Pc
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs

N°	Code	GC-GC/MS	Packaging

DRUGS OF ABUSE IN HAIR

INSIGHTS

Once embedded in the hair, by the systemic circulation and by the contribution of sweat and sebum, substances of abuse remain impounded in the keratinous array in a stable way over time as a function of their lipophilic, molecular weight, the pKa and the steric encumbrance. The analysis of substances of abuse in keratinous array is an ideal addendum to the analysis of blood or urine as it provides information regarding an earlier time than that covered by other biological matrices and refers to a longer time period (one or more months) as a function of the length of the hair. The search for substances of abuse in hair can be used to test use, abuse and misuse over time to determine intensity and its history and then provide analytical data with medico-legal value. Determination in hair may be required in the following cases: deaths related to the use of substances of abuse, assessment of ineligibility for driving, criminal liability, reliance custody of infants, prenatal exposure to substances of abuse and finally as confirmation of sporadic consumption or a dependency in workers.

109	**GC49010**	**Drugs of Abuse in hair by GC/MS** **· CONFIRMATION KIT (Extractive Method)** (3,4-MDA, 3,4-MDE, 3,4-MDMA, 6-MAM, Amphetamine, Benzoylecgonine, Buprenorphine, Cocaethylene, Cocaine, Codeine, Ecgonine Methyl Ester, EDDP, MBDB, Methamphetamine, Methadone, Morphine) An Evaporation System is necessary!	**1 x 50 tests**
	GC49016	Calibrator for Drugs of Abuse in hair (3,4-MDA, 3,4-MDE, 3,4-MDMA, 6-MAM, Amphetamine, Benzoylecgonine, Buprenorphine, Cocaethylene, Cocaine, Codeine, Ecgonine Methyl Ester, EDDP, MBDB, Methamphetamine, Methadone, Morphine)	1 x 2000 mg/ 1 x 3 x 0,3 ml / 1 x 20 ml
	GC49019	Control for Drugs of Abuse in hair (3,4-MDA, 3,4-MDE, 3,4-MDMA, 6-MAM, Amphetamine, Benzoylecgonine, Buprenorphine, Cocaethylene, Cocaine, Codeine, Ecgonine Methyl Ester, EDDP, MBDB, Methamphetamine, Methadone, Morphine)	1 x 2000 mg/ 1 x 3 x 0,5 ml / 1 x 30 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24533	Syringe of 50 µl 705 N Syr (22S/51/2)	1 Pc
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs

INSIGHTS

Delta-9-TetraCannabinol (commonly called THC, Delta-9-THC or Tetrahydrocannabinol) is one of the main and best known active principles of cannabis. It is a psychotropic substance produced by cannabis flowers, it can be ingested and most commonly smoked. It has pain-killing properties (sometimes used as treatment for pain), causes euphoria, anti-nausea, antiemetic, can stimulate appetites and reduce intraocular pressure and aggressiveness.

110	**GC53010**	**Delta-9-THC in hair by GC/MS** **· CONFIRMATION KIT (Extractive Method)** An Evaporation System is necessary!	**1 x 50 tests**
	GC53016	Calibrator for Delta-9-THC in hair	1 x 2000 mg/ 1 x 0,3 ml/ 1 x 10 ml
	GC53019	Control for Delta-9-THC in hair	1 x 2000 mg/ 1 x 0,5 ml/ 1 x 10 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24533	Syringe of 50 µl 705 N Syr (22S/51/2)	1 Pc
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs

N°	Code	GC-GC/MS	Packaging

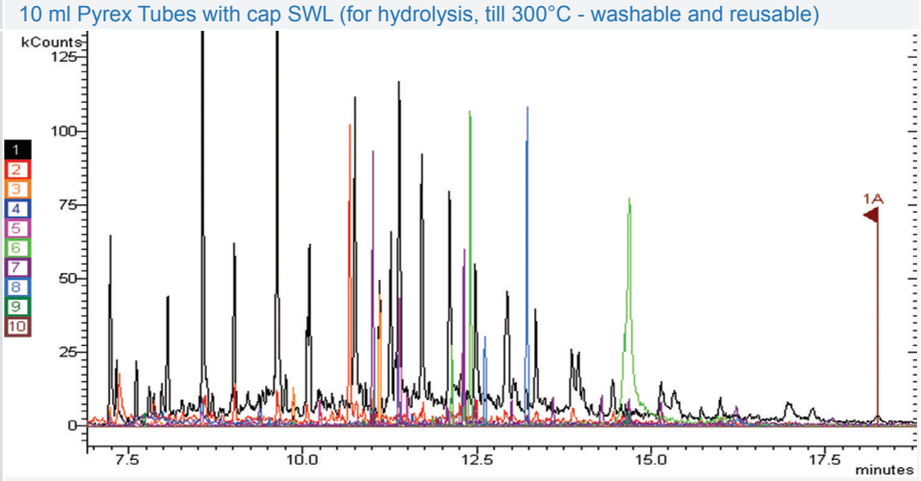
DRUGS OF ABUSE IN WHOLE BLOOD

INSIGHTS

Determination of substance of abuse in biological liquids is generally performed using immunometric techniques which are based on the Antigen-Antibody reaction. Since such techniques cannot exclude false positives,the confirmation via Gas Chromatography (GC) or Liquid Chromatography (LC) coupled with Mass Spectrometer (MS) is required.

111	GC89010	**Basic Drugs of Abuse in whole blood by GC/MS · CONFIRMATION KIT (Extractive Method)** (6-MAM, Benzoylecgonine, Buprenorphine, Cocaethylene, Cocaine, Codeine, Ecgonine Methyl Estere, EDDP, Methadone, Morphine, Norbuprenorphine) An Evaporation System plus an ultrasonic bath are necessary!	**1 x 50 tests**

LC89016	Calibrator for Drugs of Abuse in whole blood (11-OH-THC, 3,4-MDA, 3,4-MDE, 3,4-MDMA, 6-MAM, Amphetamine, Benzoylecgonine, Buprenorphine, Cocaethylene, Cocaine, Codeine, delta-9-THC, delta-9-THC-COOH, Ecgonine Methyl Estere, EDDP, Fentanyl, Ketamine, MBDB, Methamphetamine, Methadone, Morphine, Norbuprenorphine)	7 x 2 x 1 ml
LC89019	Control for Drugs of Abuse in whole blood - Levels 1, 2 and 3 (11-OH-THC, 3,4-MDA, 3,4-MDE, 3,4-MDMA, 6-MAM, Amphetamine, Benzoylecgonine, Buprenorphine, Cocaethylene, Cocaine, Codeine, delta-9-THC, delta-9-THC-COOH, Ecgonine Methyl Estere, EDDP, Fentanyl, Ketamine, MBDB, Methamphetamine, Methadone, Morphine, Norbuprenorphine)	3 x 5 x 1 ml
GC89030	Deuterated Internal Standard Mix Solution in whole blood (6-MAM-D6, Beg-D8, Buprenorphine-D4, Cocaethylene-D3, Cocaine-D3, Codeine-D6, EDDP-D3, Methadone-D9, Morphine-D6, Norbuprenorphine-D3)	1 x 750 ul
SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
ZRE24533	Syringe of 50 µl 705 N Syr (22S/51/2)	1 Pc
Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs



Whole Blood calibrator

RT (min)	Analyte	RT (min)	Analyte	RT (min)	Analyte	RT (min)	Analyte
7.6	*EME*	11.8	*BEG*	17.6	*Norbuprenorfine*	11.8	*BEG-D8*
10.5	*EDDP*	12.5	*Codeine*	10.5	*EDDP-D3*	12.5	*Codeine D6*
11.1	*Methadone*	12.7	*Morphine*	11.1	*Methadone-D9*	12.7	*Morphine-D6*
11.5	*Cocaine*	13.1	*6-MAM*	11.5	*Cocaine-D3*	13.1	*6-MAM-D6*
11.8	*Cocaethylene*	20.4	*Buprenorphine*	11.8	*Cocaethylene-D3*	17.6	*Norbuprenorfine-D3*

N°	Code	GC-GC/MS	Packaging
		INSIGHTS Amphetamines are synthetic psychoactive drugs acting on the Central Nervous System. Similar to Adrenaline (natural hormone produced by the organism in case of stress, tension, physical stress or strong emotions). Amphetamines are found in pill form or capsules, granulated, gel or crystals. They are present is some pharmaceuticals used to reduce appetite or in antidepressants. They are also used to lace Ecstasy, Cocaine or LSD.	
112	GC89110	**Amphetamines in whole blood by GC/MS** **· CONFIRMATION KIT (Extractive Method)** (3,4-MDA, 3,4-MDE, 3,4-MDMA, Amphetamine, MBDB, Methamphetamine) An Evaporation System plus an ultrasonic bath are necessary!	**1 x 50 tests**
	LC89016	Calibrator for Drugs of Abuse in whole blood (11-OH-THC, 3,4-MDA, 3,4-MDE, 3,4-MDMA, 6-MAM, Amphetamine, Benzoylecgonine, Buprenorphine, Cocaethylene, Cocaine, Codeine, delta-9-THC, delta-9-THC-COOH, Ecgonine Methyl Estere, EDDP, Ketamine, MBDB, Methamphetamine, Methadone, Morphine, Norbuprenorphine)	7 x 2 x 1 ml
	LC89019	Control for Drugs of Abuse in whole blood - Levels 1, 2 and 3 (11-OH-THC, 3,4-MDA, 3,4-MDE, 3,4-MDMA, 6-MAM, Amphetamine, Benzoylecgonine, Buprenorphine, Cocaethylene, Cocaine, Codeine, delta-9-THC, delta-9-THC-COOH, Ecgonine Methyl Estere, EDDP, Ketamine, MBDB, Methamphetamine, Methadone, Morphine, Norbuprenorphine)	3 x 5 x 1 ml
	GC89130	Deuterated Internal Standard Mix Solution in whole blood (MDA-D5, MDE-D5, MDMA-D5, Amphetamine-D11, Methamphetamine-D11)	1 x 750 ul
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24533	Syringe of 50 µl 705 N Syr (22S/51/2)	1 Pc
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
		INSIGHTS Delta-9-TetraCannabinol (commonly called THC, Delta-9-THC or Tetrahydrocannabinol) is one of the main and best known active principles of cannabis. It is a psychotropic substance produced by cannabis flowers, it can be ingested and most commonly smoked. It has pain-killing properties (sometimes used as treatment for pain), causes euphoria, anti-nausea, antiemetic, can stimulate appetites and reduce intraocular pressure and aggressiveness.	
113	GC90010	**Cannabinoids in whole blood by GC/MS** **· CONFIRMATION KIT ·** (delta-9-THC, delta-9-THC-COOH, 11-OH-THC) An Evaporation System is necessary!	**1 x 50 tests**
	LC89016	Calibrator for Drugs of Abuse in whole blood (11-OH-THC, 3,4-MDA, 3,4-MDE, 3,4-MDMA, 6-MAM, Amphetamine, Benzoylecgonine, Buprenorphine, Cocaethylene, Cocaine, Codeine, delta-9-THC, delta-9-THC-COOH, Ecgonine Methyl Estere, EDDP, Ketamine, MBDB, Methamphetamine, Methadone, Morphine, Norbuprenorphine)	7 x 2 x 1 ml
	LC89019	Control for Drugs of Abuse in whole blood - Levels 1, 2 and 3 (11-OH-THC, 3,4-MDA, 3,4-MDE, 3,4-MDMA, 6-MAM, Amphetamine, Benzoylecgonine, Buprenorphine, Cocaethylene, Cocaine, Codeine, delta-9-THC, delta-9-THC-COOH, Ecgonine Methyl Estere, EDDP, Ketamine, MBDB, Methamphetamine, Methadone, Morphine, Norbuprenorphine)	3 x 5 x 1 ml
	GC90030	Deuterated Internal Standard Mix Solution in whole blood (OH-THC-D3, THC-COOH-D9, THC-D3)	1 x 750 ul
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	ZRE24533	Syringe of 50 µl 705 N Syr (22S/51/2)	1 Pc
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs

N°	Code	GC-GC/MS	Packaging
	NEW UNIQUE	INSIGHTS The objective of this method is to titrate the concentrations of certain forms of cannabinoids present in galenic oil production. The pharmacist shall prepare in the pharmacy magistral cannabis-based preparations in compliance with the NBP. In order to ensure the quality of the product, the titration of the active substance(s) must be carried out for each herbal preparation by sensitive and specific methods such as liquid or gas chromatography coupled with mass spectrometry and the extraction method must be authorized in accordance with current legislation.	
114	**GC88810**	**Oleolites (Phytocannabinoids) for therapeutic use by GC/MS** Cannabidiol (CBD), Cannabidiolic acid (CBDA), Cannabigerol (CBG), Cannabinol (CBN), Tetrahydrocannabinolic acid (THCA), Tetrahydrocannabinol (THC), Tetrahydrocannabivarin (THCV)	**1 x 100 tests**
	GC88816	Calibrator for Oleolites (Phytocannabinoids) for therapeutic use Cannabidiol [CBD], Cannabidiolic Acid [CBDA], Cannabigerol [CBG], Cannabinol [CBN], Tetrahydrocannabinol [THC], Tetrahydrocannabinolic Acid [THCA], Tetrahydrocannabivarin [THCV]	6 x 2 x 600 µl
	GC88819	Control for Oleolites (Phytocannabinoids) for therapeutic use – Levels 1 and 2 Cannabidiol [CBD], Cannabidiolic Acid [CBDA], Cannabigerol [CBG], Cannabinol [CBN], Tetrahydrocannabinol [THC], Tetrahydrocannabinolic Acid [THCA], Tetrahydrocannabivarin [THCV]	2 x 1 x 1 ml
	GC88830	Deuterated Internal Standard Mix Solution (CBD-D3, CBN-D3, THC-D3)	1 x 5 ml
	ZRE13623	Rxi-5silMS Analytical Column ~1000 injections (30 x 0,25 mm - 0,25 µm)	1 Pc
	S29057U	Standard glass vials of 2 ml with screw caps for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C-washable and reusable)	1 x 40 Pcs

N°	Code	GC-GC/MS	Packaging

INSIGHTS

Ethyl alcohol is an aliphatic alcohol PM=46,07. Usually, it is quickly absorbed through the stomach, small intestine and colon. The time necessary to complete the process of absorption is from 2 to 6 hours and varies as a result of different factors such as the presence of food and other liquids. It has been demonstrated that the maximum concentration is achieved approximately 20 minutes from consumption in blood, saliva and expired air, while in urine the maximum concentration is achieved after approximately two hours. The excessive consumption of alcohol provokes, in the short term, clinical situations of varied gravity that could require medical intervention, both for the direct effects of drunkenness and for indirect ones (eg. car accidents). The doctor could apply to the Laboratory for different reasons such as :
- to assess a possible cause of coma, in patient without cranial trauma;
- to assess the cause of coma in patient with trauma cranial (eg. as a result of a car accident);
- to diagnose drunkenness in patient with doubtful symptomatology.

Small doses of ethanol generally produce euphoria and relaxation; people experiencing these symptoms tend to become talkative and less inhibited, and may exhibit poor judgment. At higher doses ethanol acts as a central nervous system depressant. It also impairs sensory and motor function, cognition. It causes unconsciousness, and possible death.

115	**GC73010**	**Ethanol in whole blood by detector FID and MS-headspace · CONFIRMATION KIT**	**1 x 100 tests**
	GC73016	Calibrator for Ethanol in Whole Blood	6 x 1 ml/ 1 x 3 x 2 ml
	GC73019	Control for Ethanol in Whole Blood - Levels 1 and 2	4 x 1 ml/ 1 x 2 x 2 ml
	SCP8944	VF-5ms Column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	ZRE13623	RxiSil-5ms capillary column ~ 1000 injections (30 m x 0,25 mm ID, DF= 0,25 µm)	1 Pc
	S51834475	Glass vials 10 ml for headspace (need the crimper) / 100 pcs	1 x 100 Pcs
	S80100165	Magnetic caps with teflon and sylicon septa for headspace vials (need the crimper)	1 x 100 Pcs
	S50404669	New Easy Grip Manual Crimper for 20 mm	1 Pc
	S50404671	New Easy Grip Manual Decapper for 20 mm crimper top vials	1 Pc
	ZRE24563	Syringe of 100 µl for liquid and gas injection, 1710 N with interchangeable pyston	1 Pc
	ZRE24533	Syringe of 50 µl 705 N Syr (22S/51/2)	1 Pc

LC/MS

SPECIAL CLINICAL CHEMISTRY

N°	Code	LC-MS/MS	Packaging

TUMOR MARKERS

INSIGHTS

Catecholamines are dihydroxyl organic compounds characterized by a phenolic ring. Epinephrine (E), Norepinephrine (NE), and Dopamine are the most important members of this family. The biosynthetic pathway of catecholamines uses L-tyrosine as initial substratum. Catecholamines are often determined in urine for neurological diagnosis and for monitoring the response to therapy in illnesses like pheochromocytoma and neuroblastoma. Pheochromocytoma is a catecholamine-producing tumor derived from adrenomedullary chromaffin cells. They are dangerous because of their capacity to store and release catecholamines in large amounts with subsequent production of alarming syndromes including sustained hypertension, etc. The blood test is more useful when the patient is affected by persistent hypertension or such episodes; this is because the hormones do not remain in the circulatory system long enough, but they are utilized, metabolized and expelled. The exam on the urinary matrix measures the quantity of catecholamines released in 24 hours. Since the hormonal concentrations vary over the day, the examination of the urine sample can determine an excessive production that would be overlooked on a plasmatic matrix. Neuroblastoma, the second most common solid tumor that occurs during childhood, may appear almost anywhere along the sympathetic nervous system chain. This tumor synthesizes and secretes catecholamines and metabolites like DOPA, dopamine, VMA, and homovanillic acid.

116	**LC77010**	**Catecholamines/Metanephrines in urine by LC/MS (Extractive Method)** (3-Methoxytyramine , Dopamine, Epinephrine, Metanephrine, Norepinephrine, Normetanephrine)	**1 x 100 tests**
	SK77010	Starter kit for Catecholamines/Metanephrines in urine by LC/MS	11 x 1 ml
	LC77011	Catecholamines/Metanephrines in urine by LC/MS - Mobile Phase M1	4 x 500 ml
	LC77021	Catecholamines/Metanephrines in urine by LC/MS - Mobile Phase M2	4 x 500 ml
	LC77016	Calibrator for Biogenic Amines in urine (3-Methoxytyramine , 5-hydroxyindolacetic acid, Dopamine, Epinephrine, Homovanillic Acid, Metanephrine, Norepinephrine, Normetanephrine, Vanilmandelic acid)	7 x 2 x 1 ml
	LC77019	Control for Biogenic Amines in urine - Levels 1, 2 and 3 (3-Methoxytyramine , 5-hydroxyindolacetic acid, Dopamine, Epinephrine, Homovanillic Acid, Metanephrine, Norepinephrine, Normetanephrine, Vanilmandelic acid)	3 x 5 x 1 ml
	LC77030	Deuterated Internal Standard Mix Solution in urine (Dopamine-D4, Epinephrine-D6, Metanephrine-D3, Norepinephrine-D6, Normetanephrine-D3)	1 x 800 µl
	S186004801	ACQUITY UPLC BEH AMIDE Analytical column ~ 1000 injections (100 x 2,1 mm - 1,7 µm)	1 Pc
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	UNIQUE		
117	**LC97010**	**Catecholamines/Metanephrines in plasma by LC/MS (Extractive Method)** (3-Methoxytyramine , Dopamine, Epinephrine, Metanephrine, Norepinephrine, Normetanephrine) **A Positive Pressure 96 Manifold System is necessary !**	**1 x 96 tests**
	SK97010	Starter kit for Catecholamines/Metanephrines in plasma by LC/MS	11 x 1 ml
	LC97011	Catecholamines/Metanephrines in plasma by LC/MS - Mobile Phase M1	4 x 500 ml
	LC97021	Catecholamines/Metanephrines in plasma by LC/MS - Mobile Phase M2	4 x 500 ml
	LC97016	Calibrator for Biogenic Amines in plasma (3-Methoxytyramine , 5-hydroxyindolacetic acid, Dopamine, Epinephrine, Homovanillic Acid, Metanephrine, Norepinephrine, Normetanephrine, Vanilmandelic acid)	7 x 2 x 1 ml
	LC97019	Control for Biogenic Amines in plasma - Levels 1, 2 and 3 (3-Methoxytyramine , 5-hydroxyindolacetic acid, Dopamine, Epinephrine, Homovanillic Acid, Metanephrine, Norepinephrine, Normetanephrine, Vanilmandelic acid)	3 x 5 x 1 ml
	LC97030	Deuterated Internal Standard Mix Solution in plasma (Dopamine-D4, Epinephrine-D6, Metanephrine-D3, Norepinephrine-D6, Normetanephrine-D3)	1 x 1 ml
	S186004801	ACQUITY UPLC BEH AMIDE Analytical column ~ 1000 injections (100 x 2,1 mm - 1,7 µm)	1 Pc
	S51843550	Clear Glass Vials with reduced volume (goblet form)	1 x 100 Pcs
	S51820717	Caps for glass Vials with reduced volume (goblet form)	1 x 100 Pcs

N°	Code	LC-MS/MS	Packaging
		INSIGHTS The dosage of urinary metanephrines represents a reliable test for the screening of pheochromocytoma. These substances derive from the metabolism of catecholamines, hormones produced and secreted by medullary of the adrenal glands, in order to prepare the organism for stressful events. Pheochromocytoma is a tumor that affects adrenalin glands causing a hypersecretion of catecholamines; as a result, levels of Adrenaline and Noradrenaline increase, as wells as their metabolites, called metanephrines. They form inside the tumor and are secreted inconsistently by the tumor.	
118	**LC97110**	**Free Metanephrines in Plasma by LC/MS (Extractive method)** **(Metanephrine Normetanephrine 3-Methoxytyramine)** **A Positive Pressure 96 Manifold System is necessary !**	**1 x 96 tests**
	SK97110	Starter kit for Metanephrines in plasma by LC/MS	5 x 1 ml
	LC97111	Free Metanephrines in plasma by LC/MS - Mobile Phase M1	4 x 500 ml
	LC97121	Free Metanephrines in plasma by LC/MS - Mobile Phase M2	4 x 500 ml
	LC97016	Calibrator for Biogenic Amines in plasma (3-Methoxytyramine, 5-hydroxyindolacetic acid, Dopamine, Epinephrine, Homovanillic Acid, Metanephrine, Norepinephrine, Normetanephrine, Vanilmandelic acid)	7 x 2 x 1 ml
	LC97019	Control for Biogenic Amines in plasma - Levels 1, 2 and 3 (3-Methoxytyramine, 5-hydroxyindolacetic acid, Dopamine, Epinephrine, Homovanillic Acid, Metanephrine, Norepinephrine, Normetanephrine, Vanilmandelic acid)	3 x 5 x 1 ml
	LC97130	Deuterated Internal Standard Mix Solution in plasma (Metanephrine-D3, Normetanephrine-D3)	1 x 1 ml
	S186004801	ACQUITY UPLC BEH AMIDE Analytical column ~ 1000 injections (100 x 2,1 mm - 1,7 µm)	1 Pc
	S51843550	Clear Glass Vials with reduced volume (goblet form)	1 x 100 Pc
	S51820717	Caps for glass Vials with reduced volume (goblet form)	1 x 100 Pc
		INSIGHTS The catabolic process of monoamines is in part neuronal and happens in the mitochondria by the Monoamine oxidase (MAO) and, partly extra neuronal for catecholamines, by COMT. In particular: Homovanillic Acid (HVA) is the major metabolite of Dopamine while Vanillymandelic Acid (VMA) is the main metabolite of norepinephrine and epinephrine. - 5-hydroxyindolacetic acid (5-HIIA) is the principal final product of serotonin metabolism. The determination of its concentration in urine is utilized for the diagnosis of a neuroendocrine tumor.	
119	**LC14610**	**Free VMA/5-HIAA/HVA in urine by LC/MS** (5-hydroxyindolacetic acid , Homovanillic Acid, Vanilmandelic acid)	**1 x 100 tests**
	SK14610	Starter Kit for VMA/5-HIAA/HVA in urine by LC/MS	7 x 1 ml
	LC14611	Free VMA/5-HIAA/HVA in urine by LC/MS - Mobile Phase M1	4 x 500 ml
	LC14621	Free VMA/5-HIAA/HVA in urine by LC/MS - Mobile Phase M2	4 x 500 ml
	LC77016	Calibrator for Biogenic Amines in urine (3-Methoxytyramine, 5-hydroxyindolacetic acid, Dopamine, Epinephrine, Homovanillic Acid, Metanephrine, Norepinephrine, Normetanephrine, Vanilmandelic acid)	7 x 2 x 1 ml
	LC77019	Control for Biogenic Amines in urine - Levels 1, 2 and 3 (3-Methoxytyramine, 5-hydroxyindolacetic acid, Dopamine, Epinephrine, Homovanillic Acid, Metanephrine, Norepinephrine, Normetanephrine, Vanilmandelic acid)	3 x 5 x 1 ml
	LC14630	Deuterated Internal Standard Mix Solution in urine (5-HIAA 13C6, HVA-D5, VMA-D3)	1 x 2 ml
	Z959757902	Zorbax RRHD C18 Analytical column ~ 1000 injections (50 x 2,1 mm - 1,8 µm)	1 Pc
	S29057U	Standard glass vials of 2 ml with screw caps for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs

N°	Code	LC-MS/MS	Packaging

MARKERS FOR ADRENAL INSUFFICIENCY AND OTHER DESEASES

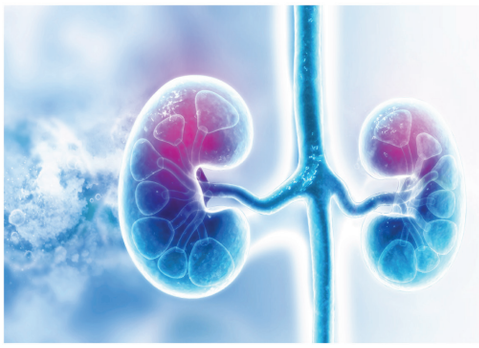
NEW

UNIQUE

INSIGHTS

Hormones are molecules which are secreted by endocrine cells. They serve to maintain homeostasis, to regulate reproduction, growth and protein synthesis. Upon secretion from the glands of the endocrine system, hormones are releases into the bloodstream so that they can reach the cells to target far from the site of production. Their chemical structure, which is polycyclic, derives from cholesterol.

120 LC91210 — Steroid Hormones in urine by LC-MS/MS — 1 x 100 tests
(Aldosterone, β-Estradiol, Cortisol, Cortisone, Estrone)

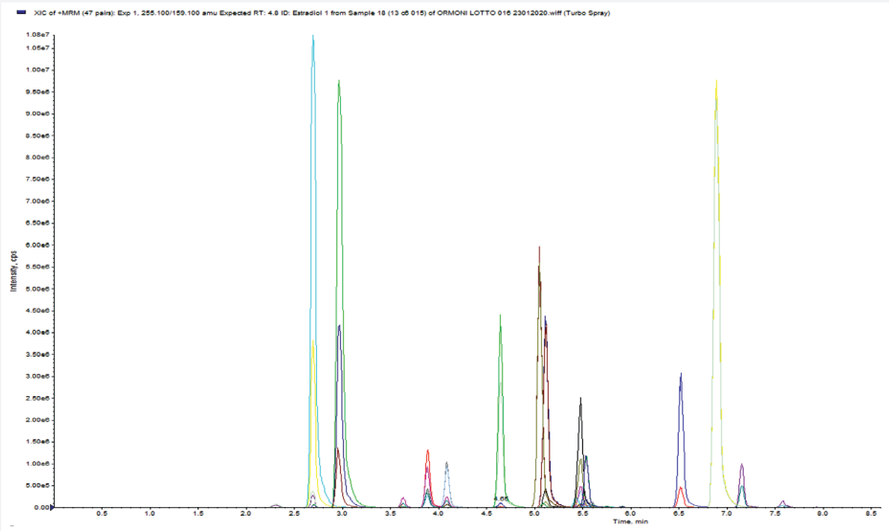


IFU

SK91210	Starter kit for Steroid Hormones in urine by LC-MS/MS	8 x 1 ml
LC91211	Steroid Hormones in urine by LC-MS/MS - Mobile Phase M1	4 x 500 ml
LC91221	Steroid Hormones in urine by LC-MS/MS - Mobile Phase M2	4 x 500 ml
LC91216	Calibrator for Steroid Hormones in urine by LC-MS/MS (Aldosterone, β-Estradiol, Cortisol, Cortisone, Estrone)	7 x 2 x 4 ml
LC91219	Control for Steroid Hormones in urine – Levels 1, 2 and 3 (Aldosterone, β-Estradiol, Cortisol, Cortisone, Estrone)	3 x 5 x 4 ml
LC91230	Deuterated Internal Standard mix Solution in urine (Aldosterone-D7, Cortisol-D4, beta-Estradiol-D5)	1 x 3000 µl
Z699675902	Poroshell 120-EC C 18 Analytical Column ~1000 injections (50 x 2.1 mm. 1.9 µm)	1 Pc
S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
S24717	Insert 100 µl for vials of 2 ml	1 x 100 Pcs
L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs

N°	Code	LC-MS/MS	Packaging
		INSIGHTS Hormones are molecules which are secreted by endocrine cells. They serve to maintain homeostasis, to regulate reproduction, development and other processes. Upon secretion from the glands of the endocrine system, hormones are releases into the bloodstream so that they can reach the cells to target far from the site of production. Their chemical structure, which is polycyclic, derives from cholesterol.	
121	LC72310	**Steroid Hormones in serum and plasma by LC/MS**	**1 x 100 tests**
122	LC72315	**Steroid Hormones in serum and plasma by LC/MS** 11-Deoxycorticosterone, 11-Deoxycortisol, 17- OH-Pregnenolone, 17-OH, Progesterone, 21-Deoxycortisol, Aldosterone, Androstenedione, Androsterone, Corticosterone, Cortisol, Cortisone, Dehydroepiandrosterone (DHEA), Dehydroepiandrosterone sulfate (DHEAS), Dihydrotestsosterone, Estradiol, Estrone, Pregnenolone, Progesterone, Testosterone) An Evaporation System is necessary!	**1 x 500 tests**

SK72310	Starter kit for Steroid Hormones in serum and plasma by LC/MS	27 x 1 ml
LC72311	Steroid Hormones in serum and plasma by LC/MS - Mobile Phase M1	4 x 500 ml
LC72321	Steroid Hormones in serum and plasma by LC/MS - Mobile Phase M2	4 x 500 ml
LC72316	Calibrator for Steroid Hormones in plasma (11-Deoxycorticosterone, 11-Deoxycortisol, 17- OH-Pregnenolone, 17-OH, Progesterone, 21-Deoxycortisol, Aldosterone, Androstenedione, Androsterone, Corticosterone, Cortisol, Cortisone, Dehydroepiandrosterone (DHEA), Dehydroepiandrosterone sulfate (DHEAS), Dihydrotestsosterone, Estradiol, Estrone, Pregnenolone, Progesterone, Testosterone)	7 x 2 x 1 ml
LC72319	Control for Steroid Hormones in plasma - Levels 1, 2 and 3 11-Deoxycorticosterone, 11-Deoxycortisol, 17- OH-Pregnenolone, 17-OH, Progesterone, 21-Deoxycortisol, Aldosterone, Androstenedione, Androsterone, Corticosterone, Cortisol, Cortisone, Dehydroepiandrosterone (DHEA), Dehydroepiandrosterone sulfate (DHEAS), Dihydrotestsosterone, Estradiol, Estrone, Pregnenolone, Progesterone, Testosterone)	3 x 5 x 1 ml
LC72330	Deuterated Internal Standard Mix Solution in serum/plasma (17-OH-Progesterone-^{13}C3, Aldosterone-D7, Cortisol-D4, DHEA-D6, DHEAS-D5, Pregnenolone-D4, Testosterone-D3, β-Estradiol-D5)	2 x 500 ul
Z699675902	Poroshell 120-EC C18 Analytical column ~ 1000 injections (50 x 2,1 mm - 1,9 µm)	1 Pc
L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
S29057U	Standard glass vials of 2 ml with screw caps for Autosampler	1 x 100 Pcs
S24717	Glass insert for vials of 2 ml	1 x 100 Pcs



N°	Code	LC-MS/MS	Packaging
123	**LC72410**	**Steroid Hormones in serum and plasma by LC/MS (Extractive Method)**	**1 x 100 tests**
124	**LC72415**	**Steroid Hormones in serum and plasma by LC/MS (Extractive Method)** (11-Deoxycorticosterone, 11-Deoxycortisol, 17- OH-Pregnenolone, 17-OH, Progesterone, 21-Deoxycortisol, Aldosterone, Androstenedione, Androsterone, Corticosterone, Cortisol, Cortisone, Dehydroepiandrosterone (DHEA), Dehydroepiandrosterone sulfate (DHEAS), Dihydrotestsosterone, Estradiol, Estrone, Pregnenolone, Progesterone, Testosterone) An Evaporation System is necessary!	**1 x 500 tests**
	SK72410	Starter kit for Steroid Hormones in serum and plasma by LC/MS	27 x 1 ml
	LC72411	Steroid Hormones in serum and plasma by LC/MS - Mobile Phase M1	4 x 500 ml
	LC72421	Steroid Hormones in serum and plasma by LC/MS - Mobile Phase M2	4 x 500 ml
	LC72316	Calibrator Steroid Hormones in plasma (11-Deoxycorticosterone, 11-Deoxycortisol, 17- OH-Pregnenolone, 17-OH, Progesterone, 21-Deoxycortisol, Aldosterone, Androstenedione, Androsterone, Corticosterone, Cortisol, Cortisone, Dehydroepiandrosterone (DHEA), Dehydroepiandrosterone sulfate (DHEAS), Dihydrotestsosterone, Estradiol, Estrone, Pregnenolone, Progesterone, Testosterone)	7 x 2 x 1 ml
	LC72319	Control for Steroid Hormones in plasma - Levels 1, 2 and 3 (11-Deoxycorticosterone, 11-Deoxycortisol, 17- OH-Pregnenolone, 17-OH, Progesterone, 21-Deoxycortisol, Aldosterone, Androstenedione, Androsterone, Corticosterone, Cortisol, Cortisone, Dehydroepiandrosterone (DHEA), Dehydroepiandrosterone sulfate (DHEAS), Dihydrotestsosterone, Estradiol, Estrone, Pregnenolone, Progesterone, Testosterone)	3 x 5 x 1 ml
	LC72430	Deuterated Internal Standards Mix Solution in serum/plasma (17-OH-Progesterone-13C3, Aldosterone-D7, beta-Estradiol-D5, Cortisol-D4, DHEA-D6, DHEAS-D5, Pregnenolone-D4, Testosterone-D3)	2 x 1,1 ml
	Z699675902	Poroshell 120-EC C18 Analytical column ~ 1000 injections (50 x 2,1 mm - 1,9 µm)	1 Pc
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S29057U	Standard glass vials of 2 ml with screw caps for Autosampler	1 x 100 Pcs
	S24717	Glass insert for vials of 2 ml	1 x 100 Pcs
	S7344223	Glass Test Tubes 13 x 100 mm	1 x 250 Pcs

INSIGHTS

Cortisol is a steroid hormone synthetized in the adrenal gland, starting from cholesterol, through an enzymatic cascade. It is the principal glucocorticoid in humans and it acts as a gene transcription factor influencing a variety of cellular responses in many tissues. Cortisol plays a key role in the metabolism of glucose, in the maintenance of vascular tone as well as regulates the immune response and the body's response to stress. Only a small percentage of circulating cortisol is biologically active, most cortisol is inactive (protein bound). When the plasma cortisol value rises, the free cortisol also increases, and is filtered by the glomerulus. The urinary free cortisol is well correlated with the concentration of serum free cortisol. The urinary free cortisol is biologically active, and is responsible for the signs and symptoms of hypercortisolism (Cushing's Syndrome). The measurement of free cortisol excretion over 24 hours associated with liquid mass spectrometry (LCMS/MS) is the preferred screening test for Cushing's syndrome. Cortisone, cortisol metabolite, is an additional parameter to help in the diagnosis of various adrenal disorders, including the abnormality in the activity of 11-beta-hydroxy-dehydrogenase (11-beta HSD), the enzyme that converts cortisol to cortisone. This method allows to determine simultaneously both the cortisol and Cortisone in 24-hour urine sample by LCMS/ MS.

125	**LC91010**	**Cortisol and Cortisone in urine by LC/MS**	**1 x 100 tests**
126	**LC91015**	**Cortisol and Cortisone in urine by LC/MS**	**1 x 500 tests**
	SK91010	Starter Kit for Cortisol and Cortisone in urine by LC/MS	3 x 1 ml
	LC91011	Cortisol and Cortisone in urine by LC/MS - Mobile Phase M1	4 x 500 ml
	LC91021	Cortisol and Cortisone in urine by LC/MS - Mobile Phase M2	4 x 500 ml
	LC91016	Calibrator for Cortisol and Cortisone in urine by LC/MS	7 x 2 x 1 ml
	LC91019	Control for Cortisol/Cortisone in urine by LC/MS - Levels 1, 2 and 3	3 x 5 x 1 ml
	LC91030	Deuterated Internal Standard Solution in urine (Cortisol-D4)	1 x 100 ul
	Z959757902	RRHD Eclipse Plus C18 Analytical column ~ 1000 injections (50 x 2,1 mm - 1,8 µm)	1 Pc
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs

N°	Code	LC-MS/MS	Packaging
	NEW	_____INSIGHTS_____ The determination and quantitative analysis of Cortisol and Cortisone in saliva is important as a monitoring of psychophysical stress and as an aid to the diagnosis of Cushing's disease.	
127	**LC91110**	**Cortisol and Cortisone in saliva by LC-MS/MS**	**1 x 100 tests**
		IFU	
	SK91110	Starter kit for Cortisol and Cortisone in saliva by LC-MS/MS	3 x 1 ml
	LC91111	Cortisol and cortisone in saliva by LC-MS/MS - Mobile Phase M1	4 x 500 ml
	LC91121	Cortisol and cortisone in saliva by LC-MS/MS - Mobile Phase M2	4 x 500 ml
	LC91116	Calibrator for Cortisol and Cortisone in saliva	7 x 2 x 3 ml
	LC91119	Control for Cortisol and Cortisone in saliva – Levels 1, 2 and 3	3 x 5 x 3 ml
	LC91130	Deuterated Internal Standard Solution in saliva (Cortisol-D4)	1 x 1 ml
	Z699675902	Poroshell 120-EC-18 C18 Analytical Column ~1000 injections (50 x 2,1 mm - 1,9 µm)	1 Pc
	Z51843550	Clear glass vials with reduced volume (goblet form) from 15 µl to 1,5 ml	1 x 100 Pcs
	Z51820717	Caps for clear glass vials with reduced volume (goblet form) from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	L-30-210	Eppendorf test tubes by 1,5 ml with caps	1 x 1000 Pcs

N°	Code	LC-MS/MS	Packaging
		EMERGING CARDIOVASCULAR BIOMARKER	
	NEW		
	UNIQUE	INSIGHTS Quantitative analysis of Trimethylamine N-oxide (T-MAO) in plasma can be considered as an aid in the diagnosis of atherosclerotic plaque formation, platelet activation and renal fibrosis.	
128	**LC21110**	**Trimethylamine n-oxide (tmao) in plasma by LC-MS/MS**	**1 x 100 tests**
		IFU	
	SK21110	Starter kit for TMAO in plasma by LC/MS	2 x 1 ml
	LC21111	TMAO in plasma by LC/MS – Mobile Phase M1	4 x 500 ml
	LC21121	TMAO in plasma by LC/MS – Mobile Phase M2	4 x 500 ml
	LC21116	Calibrator for TMAO in plasma by LC/MS	7 x 2 x 1 ml
	LC21119	Control for TMAO in plasma by LC/MS – Levels 1, 2 and 3	3 x 5 x 1 ml
	LC21130	Deuterated Internal Standard Solution in plasma (TMAO-D9)	1 x 40 ml
	S186004801	Acquity UPLC BEH AMIDE Analytical Column ~1000 injections (100 x 2,1 mm - 1,7 µm)	1 Pc
	S29057U	Standard glass vials of 2 ml with screw caps for Autosampler	1 x 100 Pcs
	S24717	Insert 100 µl for vial of 2 ml	1 x 100 Pcs
	L-30-210	Eppendorf Test tubes by 1,5 ml with caps	1 x 1000 Pcs

N°	Code	LC-MS/MS	Packaging

ANTIOXIDANT MOLECULES

INSIGHTS

Homocysteine (HCY) is a sulfurated aminoacid that derives from the demethylation of Methionine. Homocysteine is considered an independent risk factor, because it is able to increase the incidence of cardiovascular diseases independently of the presence of other causing factors. It also increases the risk of other pathologies (venous thrombosis, pulmonary embolism) as well as fetal malformations, mental decay, Alzheimer and spontaneous fractures. Folates, B12 and B6 Vitamins intake can be successfully used in different forms of hyperhomocysteinemia. For this reason, an early diagnosis is fundamental to avoid the risk of cardiac and cerebrovascular thrombotic diseases.

129	**LC09010**	**Homocysteine in plasma by LC/MS**	**1 x 100 tests**
130	**LC09015**	**Homocysteine in plasma by LC/MS**	**1 x 500 tests**
	SK09010	Starter kit for Homocysteine in plasma by LC/MS	2 x 1 ml
	LC09011	Homocysteine in plasma by LC/MS - Mobile Phase M1	4 x 500 ml
	LC09021	Homocysteine in plasma by LC/MS - Mobile Phase M2	4 x 500 ml
	LC09016	Calibrator for Homocysteine in plasma by LC/MS	5 x 2 x 1 ml
	LC09019	Control for Homocysteine in plasma by LC/MS - Levels 1 and 2	2 x 5 x 1 ml
	LC09030	Deuterated Internal Standard Solution in plasma (Homocystine-D8)	1 x 2 ml
	S58979	Supelcosil LC-CN Analytical column ~ 1000 injections (33 x 4,6 mm - 3 µm)	1 Pc
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs

INSIGHTS

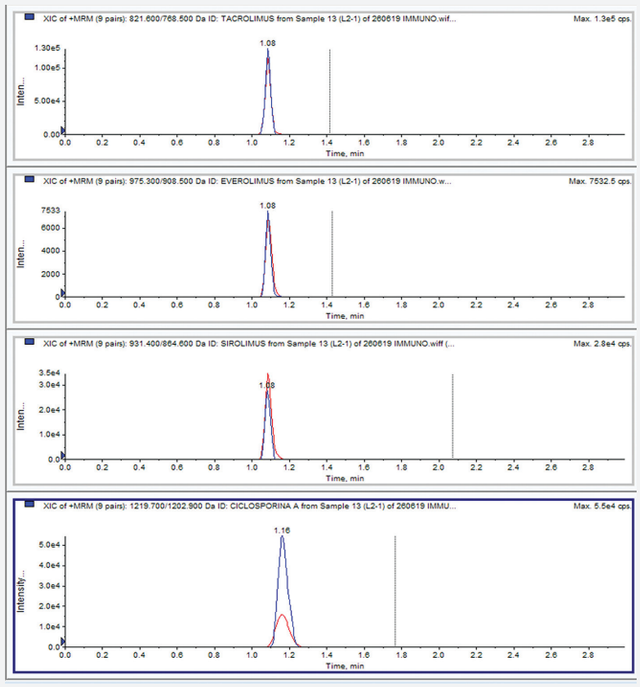
Vitamin D plays a fundamental role in the control of calcium and phosphide concentrations in the extracellular matrix and therefore in the bone mineralization processes and in maintaining skeletal integrity. It is also involved in preventing some pathological processes such as cardiovascular diseases, some tumor forms (colon, breasts), multiple sclerosis, type 1 diabetes and some infectious diseases (tuberculosis, seasonal flu). Hypovitaminosis D leads to osteoporosis and to a loss of muscle strength in aging as well.

131	**LC19110**	**25-OH Vitamin D3 and 25-OH Vitamin D2 in plasma by LC/MS**	**1 x 100 tests**
132	**LC19115**	**25-OH Vitamin D3 and 25-OH Vitamin D2 in plasma by LC/MS**	**1 x 500 tests**
	SK19110	Starter kit for 25-OH Vitamin D3 and 25-OH Vitamin D2 in plasma by LC/MS -	4 x 1 ml
	LC19011	25-OH Vitamin D3 and 25-OH Vitamin D2 in plasma by LC/MS - Mobile Phase M1	4 x 500 ml
	LC19021	25-OH Vitamin D3 and 25-OH Vitamin D2 in plasma by LC/MS - Mobile Phase M2	4 x 500 ml
	LC19016	Calibrator for 25-OH-Vitamin D3 and 25-OH Vitamin D2 in plasma by LC/MS	7 x 2 x 1 ml
	LC19019	Control for 25-OH-Vitamin D3 and 25-OH Vitamin D2 in plasma by LC/MS	3 x 5 x 1 ml
	LC19130	Deuterated Internal Standard Solution in plasma (Calcifediol-D6; 25-Hidroxyvitamin D2-D3)	1 x 200 µl
	ZRE9309A52	RAPTOR Biphenyl Analytical column ~ 1000 injections (50 x 2,1 mm - 2,7 µm)	1 pc
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 pcs
	S51820717	Caps for clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 pcs

THERAPEUTIC DRUG MONITORING

N°	Code	LC-MS/MS	Packaging
		IMMUNOSUPPRESSANTS	
		INSIGHTS Immunosuppressive drugs are used to control of severe allergic reactions, autoimmune diseases and diseases related to transplantation. The main immunosuppressive drugs used are Cyclosporine A, Tacrolimus, Sirolimus and Everolimus. Therapeutic Drug Monitoring of these medications is essential because of the risk of toxic effects such as anemia, leukopenia and thrombocytopenia.	
133	**LC75110**	**Immunosuppressants in whole blood by LC/MS**	**1 x 100 tests**
134	**LC75115**	**Immunosuppressants in whole blood by LC/MS** (Cyclosporine A, Everolimus, Sirolimus, Tacrolimus)	**1 x 500 tests**
	SK75110	Starter kit for Immunosuppressants in whole blood by LC/MS	8 x 1 ml
	LC75111	Immunosuppressants in whole blood by LC/MS - Mobile Phase M1	4 x 500 ml
	LC75121	Immunosuppressants in whole blood by LC/MS - Mobile Phase M2	4 x 500 ml
	LC75016	Calibrator in whole blood for Immunosuppressants (Cyclosporine A, Everolimus, Sirolimus, Tacrolimus)	7 x 2 x 1 ml
	LC75019	Control in whole blood for Immunosuppressants – Levels 1, 2 and 3 (Cyclosporine A, Everolimus, Sirolimus, Tacrolimus)	3 x 5 x 1 ml
	LC75130	Deuterated Internal Standard Mix Solution in whole blood (Cyclosporine A-D4, Everolimus^{13}C2-D4, Sirolimus^{13}C-D3, Tacrolimus^{13}C-D2)	1 x 400 ul
	Z51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	Z51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	For UHPLC systems		
	Z959757902	RRHD Eclipse Plus C18 Analytical column ~ 1000 injections (50 x 2,1 mm - 1,8 µm)	1 Pc
	For HPLC systems		
	ZTF17126032130	ACCUCORE C 18 Analytical column ~ 1000 injections (30 x 2,1 mm - 2,6 µm)	1 Pc
	Monodimensional		
	TF25403012101	Hypersil GOLD PFP Guard Prefilters (10 x 2,1 mm - 3 µm)	1 x 4 Pcs
	TF84200	2 mm DROP-IN HOLDER	1 Pc
	Bidimensional		
	RE917950210	Ultra PFPP 10 x 4,0 mm (SPE ON-LINE/Bidimensional Modality)	1 x 3 Pcs
	RE25021	Holder per 10 mm Guard Trident Guard System	1 Pc

N°	Code	LC-MS/MS	Packaging
	UNIQUE		
135	**LC75310**	**Immunosuppressants Dual kit in whole blood/plasma by LC/MS**	**1 x 100 tests**
136	**LC75410**	**Immunosuppressants Dual kit in whole blood/plasma by LC/MS**	**1 x 200 tests**
137	**LC75315**	**Immunosuppressants Dual kit in whole blood/plasma by LC/MS** (Cyclosporine A, Everolimus, Mycophenolic Acid, Sirolimus, Tacrolimus)	**1 x 500 tests**
	SK75310	Starter kit for Immunosuppressants in whole blood/plasma	10 x 1 ml
	LC75311	Immunosuppressants DUAL KIT in whole blood/plasma by LC/MS - Mobile Phase M1	4 x 500 ml
	LC75321	Immunosuppressants DUAL KIT in whole blood/plasma by LC/MS - Mobile Phase M2	4 x 500 ml
	LC75016	Calibrator in whole blood for Immunosuppressants (Cyclosporine A, Everolimus, Sirolimus, Tacrolimus)	7 x 2 x 1 ml
	LC75019	Control in whole blood for Immunosuppressants - Levels 1, 2 and 3 (Cyclosporine A, Everolimus, Sirolimus, Tacrolimus)	3 x 5 x 1 ml
	LC75316	Calibrator in plasma for Mycophenolic Acid	7 x 2 x 1 ml
	LC75319	Control in plasma for Mycophenolic Acid - Levels 1,2 and 3	3 x 5 x 1 ml
	LC75330	Deuterated Internal Standard Mix Solution in whole blood (Cyclosporine A-D4, Everolimus^{13}C2-D4, Sirolimus^{13}C-D3, Tacrolimus^{13}C-D2)	1 x 400 ul
	LC75230	Deuterated Internal Standard Solution in plasma (Mycophenolic Acid-D3)	1 x 100 ul
	Z51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	Z51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	For UHPLC systems		
	Z959757902	RRHD Eclipse Plus C18 Analytical column ~ 1000 injections (50 x 2,1 mm - 1,8 µm)	1 Pc
	For HPLC systems		
	ZTF17126032130	ACCUCORE C 18 Analytical column ~ 1000 injections (30 x 2,1 mm - 2,6 µm)	1 Pc
	Monodimensional		
	TF25403012101	Hypersil GOLD PFP Guard Prefilters (10 x 2,1 mm - 3 µm)	1 x 4 Pcs
	TF84200	2mm DROP-IN HOLDER	1 Pc
	Bidimensional		
	ZRE917950210	Ultra PFPP 10 x 4,0 mm (SPE ON-LINE/Bidimensional Modality)	1 x 3 Pcs
	ZRE25021	Holder per 10 mm Guard Trident Guard System	1 Pc



N°	Code	LC-MS/MS	Packaging

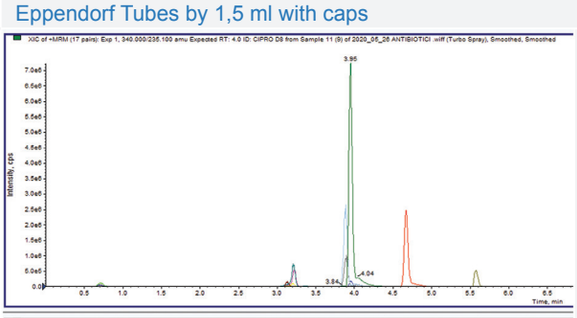
ANTI-INFECTIVE DRUGS

INSIGHTS

Technically, an "antibiotic" a substance of natural origin produced by a microorganism, able to kill another. The term in common usage today means a drug, natural or synthetic (chemotherapy), which can slow or stop the proliferation of bacteria. Antibiotics are distinguished therefore in bacteriostatics (ie, inhibit reproduction of the bacteria, preventing the split) and bactericidals (ie directly kill the organism). Usually have no effect against viruses, fungi and parasites.

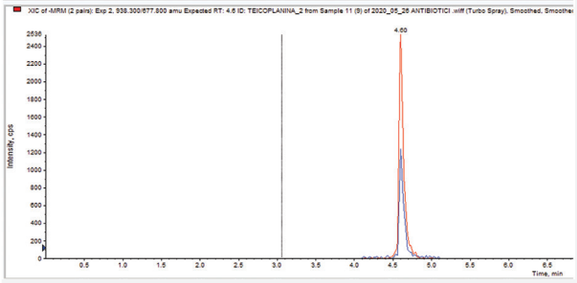
138	LC79210	**Antibiotics in plasma by LC/MS**	**1 x 100 tests**
139	LC79215	**Antibiotics in plasma by LC/MS** (Amikacin, Ceftazidime, Ciprofloxacin, Daptomycin, Gentamicin, Levofloxacin, Linezolid, Meropenem, Streptomycin, Teicoplanin, Vancomycin)	**1 x 500 tests**

SK79210	Starter kit for Antibiotics in plasma by LC/MS	16 x 1 ml
LC79211	Antibiotics in plasma by LC/MS - Mobile Phase M1	4 x 500 ml
LC79221	Antibiotics in plasma by LC/MS - Mobile Phase M2	4 x 500 ml
LC79016	Calibrator for Antibiotics in plasma (Amikacin, Ceftazidime, Ciprofloxacin, Daptomycin, Gentamicin, Levofloxacin, Linezolid, Meropenem, Streptomycin, Teicoplanin, Vancomycin)	7 x 2 x 1 ml
LC79019	Control for Antibiotics in plasma - Levels 1, 2 and 3 (Amikacin, Ceftazidime, Ciprofloxacin, Daptomycin, Gentamicin, Levofloxacin, Linezolid, Meropenem, Streptomycin, Teicoplanin, Vancomycin)	3 x 5 x 1 ml
LC79230	Deuterated and not Deuterated Internal Standard Mix Solution in plasma (Apramycin (not deuterated), Ciprofloxacin-D8, Daptomycin-D5, Levofloxacin-D8, Meropenem-D6)	1 x 30 ml
ZA2001100X020	Analytical column Polaris C18 ~ 1000 injections (100 x 2 mm, 3 um)	1 Pc
S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
S51820717	Caps for Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs



Calibrators in plasma for antibiotics:

A) Positive acquisition of the molecules listed below, according to an increasing retention time: Gentamicin, Amikacin, Streptomycin, Linezolid, Levofloxacin, Ciprofloxacin, Vancomycin, Meropenem, Ceftazidime, Daptomycin



B) Negative acquisition of Teicoplanin

N°	Code	LC-MS/MS	Packaging
	UNIQUE	INSIGHTS Ethambutol is active against mycobacteria resistant to other drugs commonly used to treat tuberculosis. Among the most common side effects, there are optic neuritis, peripheral neuritis, rash, thrombocytopenia, rash. Isoniazid is the main anti-tuberculosis antibiotic, acts by inhibiting the synthesis of mycolic acids, essential components of the cell wall of the bacterium Mycobacterium tuberculosis. The Rifampicin is a bactericidal antibiotic of the rifamycin group. It is a semi-synthetic compound derived from Amycolaptosis rifamycinica (formerly known as Amycolaptosis Mediterranean or Streptmyces Mediterranean).	
140	**LC79110**	**Antituberculosis Drugs in plasma by LC/MS** (Ethambutol, Isoniazid, Rifampicin)	**1 x 100 tests**
	SK79110	Starter kit for Antituberculosis Drugs in plasma by LC/MS	3 x 1 ml
	LC79111	Antituberculosis Drugs in plasma by LC/MS - Mobile Phase M1	4 x 500 ml
	LC79121	Antituberculosis Drugs in plasma by LC/MS - Mobile Phase M2	4 x 500 ml
	LC79116	Calibrator for Antitubercolosis drugs in plasma	5 x 2 x 1 ml
	LC79119	Control for Antituberculosis drugs in plasma - Levels 1 and 2	2 x 5 x 1 ml
	ZTF2500305213	GOLD Analytical column ~ 1000 injections (50 x 2,1 mm - 3 µm) for HPLC	1 Pc
	Z25002052130	Hypersil GOLD Analytical column ~ 1000 injections (50 x 2,1 mm - 1,9 µm) for UHPLC	1 Pc
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
		INSIGHTS Systemic fungus infections are the main cause of death in patients where the immune system is compromised because of cancer or chemotherapy, organ transplants or HIV-1. Fungi commonly cause superficial infections of the skin or other soft tissues. A correct monitoring of plasmatic levels of antimycotics is necessary, in order to make sure the concentration is sufficient but not too toxic.	
141	**LC82010**	**Antimycotics in plasma by LC/MS** (5-Flucytosine, Anidulafungin, Caspofungin, Fluconazole, Hydroxy, Itraconazole, Isavuconazole, Itraconazole, Ketoconazole, Micafungin, Posaconazole, Voriconazole)	**1 x 100 tests**
	SK82010	Starter Kit for Antimycotics in plasma by LC/MS	13 x 1 ml
	LC82011	Antimycotics in plasma by LC/MS - Mobile Phase M1	4 x 500 ml
	LC82021	Antimycotics in plasma by LC/MS - Mobile Phase M2	4 x 500 ml
	LC82031	Antimycotics in plasma by LC/MS - Mobile Phase M3 (only Micafungin)	4 x 500 ml
	LC82016	Calibrator for Antimycotics in plasma (5-Flucytosine, Anidulafungin, Caspofungin, Fluconazole, Hydroxy, Itraconazole, Isavuconazole, Itraconazole, Ketoconazole, Micafungin, Posaconazole, Voriconazole)	5 x 2 x 1 ml
	LC82019	Control for Antimycotics in plasma - Levels 1 and 2 (5-Flucytosine, Anidulafungin, Caspofungin, Fluconazole, Hydroxy, Itraconazole, Isavuconazole, Itraconazole, Ketoconazole, Micafungin, Posaconazole, Voriconazole)	2 x 5 x 1 ml
	LC82030	Deuterated and not Deuterated Internal Standard Mix Solution in plasma (Fenbuconazole (not deuterated), Isovuconazole-D4)	1 x 30 ml
	ZTF17126032130	ACCUCORE C18 Analytical column ~ 1000 injections (30 x 2,1 mm - 2,6 µm)	1 Pc
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs

N°	Code	LC-MS/MS	Packaging
		ANTIARRHYTHMICS	
		INSIGHTS Antiarrhythmic agents, also known as cardiac dysrhythmia medications, are a group of pharmaceuticals that are used to suppress abnormal rhythms of the heart (cardiac arrhythmias), such as atrial fibrillation, atrial flutter, ventricular tachycardia, and ventricular fibrillation. Many attempts have been made to classify antiarrhythmic agents. The problem arises from the fact that many of the antiarrhythmic agents have multiple modes of action, making any classification imprecise.	
142	**LC99110**	**Antiarrhythmics in serum and in plasma by LC/MS**	**1 x 100 tests**
143	**LC99115**	**Antiarrhythmics in serum and in plasma by LC/MS** (Amiodarone, Desethylamiodarone, Flecainide, Propafenone, Sotalol, Quinidine)	**1 x 500 tests**
	SK99110	Starter kit for Antiarrhythmics in plasma by LC/MS	10 x 1 ml
	LC99111	Antiarrhythmics in plasma by LC/MS Mobile Phase M1	4 x 500 ml
	LC99121	Antiarrhythmics in plasma by LC/MS Mobile Phase M2	4 x 500 ml
	LC99116	Calibrator in plasma for Antiarrhythmics (Amiodarone, Desethylamiodarone, Flecainide, Propafenone, Sotalol, Quinidine)	7 x 2 x 1 ml
	LC99119	Control in plasma for Antiarrhythmics – Levels 1, 2 and 3 (Amiodarone, Desethylamiodarone, Flecainide, Propafenone, Sotalol, Quinidine)	3 x 5 x 1 ml
	LC99130	Deuterated Internal Standard Mix Solution in plasma (Amiodarone-D4, Desethylamidarone-D4, Flecainide-D3, Propafenone-D5)	1 x 5 ml
	Z699675902	Poroshell 120 EC-C18 Analytical column ~ 1000 injections (50 x 2,1 mm, 1,9 µm)	1 Pc
	S29057U	Standard Vial of 2 ml with screw cap	100 pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs

N°	Code	LC-MS/MS	Packaging
		ANTIEPILEPTICS	
	UPGRADE	Column replacement has been carried out in order to improve the chromatographic separation and to reach a better analytical performance.	
144	LC05010	**Antiepileptics in plasma by LC-MS/MS**	**1 x 100 tests**
145	LC05015	**Antiepileptics in plasma by LC-MS/MS** (10,11-Dihydro-10-Hydroxy-Carbamazepine, Carbamazepine, Carbamazepine Epoxide, Desmethylsuximide, Ethosuximide, Lacosamine, Lamotrigine, Levetiracetam, Methsuximide, Oxcarbazepine, Phelbamate, Phenobarbital, Phenytoin, Perampanel, Primidone, Rufinamide, Topiramate, Valproic acid, Zonisamide)	**1 x 500 tests**

IFU 100 tests **IFU 500 tests**

	SK05010	Starter kit for Antiepileptics in plasma by LC-MS/MS	25 x 1 ml
	LC05011	Antiepileptics in plasma by LC-MS/MS -Mobile Phase M1	4 x 500 ml
	LC05021	Antiepileptics in plasma by LC-MS/MS -Mobile Phase M2	4 x 500 ml
	LC04916	Calibrator for Antiepileptics in plasma (10,11-Dihydro-10-Hydroxycarbazepine, Brivaracetam, Carbamazepine, Carbamazepine-epoxide, Desmethylsuximide, Ethosuximide, Gabapentin, Lacosamide, Lamotrigine, Levetiracetam, Metosuximide, Oxcarbazepine, Perampanel, Phelbamate, Phenobarbital, Phenytoin, Pregabalin, Primidone, Rufinamide, Stiripentol, Sultiame, Tiagabine, Topiramate, Valproic Acid, Vigabatrin, Zonisamide)	7 x 2 x 1 ml
	LC04919	Control for Antiepileptics in plasma – Levels 1, 2 and 3 (10,11-Dihydro-10-Hydroxycarbazepine, Brivaracetam, Carbamazepine, Carbamazepine-epoxide, Desmethylsuximide, Ethosuximide, Gabapentin, Lacosamide, Lamotrigine, Levetiracetam, Metosuximide, Oxcarbazepine, Perampanel, Phelbamate, Phenobarbital, Phenytoin, Pregabalin, Primidone, Rufinamide, Stiripentol, Sultiame, Tiagabine, Topiramate, Valproic Acid, Vigabatrin, Zonisamide)	3 x 5 x 1 ml
	LC05030	Deuterated Internal Standard Mix Solution in plasma (Ethosuximide-D3, Lacosamide-D3, Levetiracetam-D6, Normesuximide(Desmethylsuximide)–D5, Phelbamate-D4, Zonisamide-D4)	1 x 50 ml
	Z699675902	Poroshell 120-EC C18 Analytical column ~1000 injections (50 x 2,1 mm - 1,9 µm)	1 Pc
	S51843550	Clear glass vials with reduced volume (globlet form) from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for clear glass vials with reduced volume (goblet form) from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	L-30-210	Eppendorf Test tubes by 1,5 ml with caps	1 x 1000 Pcs

N°	Code	LC-MS/MS	Packaging
146	**LC05115**	**Antiepileptics in serum and in plasma by LC/MS** (10,11-Dihydro-10-Hydroxycarbamazepine, Brivaracetam, Carbamazepine, Carbamazepine-epoxide, Desmethylsuximide, Ethosuximide, Gabapentin, Lacosamide, Lamotrigine, Levetiracetam, Metosuximide, Oxcarbazepine, Perampanel, Phelbamate, Phenobarbital, Phenytoin, Pregabalin, Primidone, Rufinamide, Stiripentol, Sulthiame, Tiagabine, Topiramate, Valproic Acid, Vigabatrin, Zonisamide)	**1 x 500 tests**
	SK05010	Starter kit for Antiepileptics in serum and in plasma by LC/MS	44 x 1 ml
	LC05111	Antiepileptics in serum and in plasma by LC/MS - Mobile Phase M1	4 x 500 ml
	LC05121	Antiepileptics in serum and in plasma by LC/MS - Mobile Phase M2	4 x 500 ml
	LC04916	Calibrator for Antiepileptics in plasma (10,11-Dihydro-10-Hydroxycarbamazepine, Brivaracetam, Carbamazepine, Carbamazepine-epoxide, Desmethylsuximide, Ethosuximide, Gabapentin, Lacosamide, Lamotrigine, Levetiracetam, Metosuximide, Oxcarbazepine, Perampanel, Phelbamate, Phenobarbital, Phenytoin, Pregabalin, Primidone, Rufinamide, Stiripentol, Sulthiame, Tiagabine, Topiramate, Valproic Acid, Vigabatrin, Zonisamide)	7 x 2 x 1 ml
	LC04919	Control for Antiepileptics in plasma – Levels 1, 2 and 3 (10,11-Dihydro-10-Hydroxycarbamazepine, Brivaracetam, Carbamazepine, Carbamazepine-epoxide, Desmethylsuximide, Ethosuximide, Gabapentin, Lacosamide, Lamotrigine, Levetiracetam, Metosuximide, Oxcarbazepine, Perampanel, Phelbamate, Phenobarbital, Phenytoin, Pregabalin, Primidone, Rufinamide, Stiripentol, Sulthiame, Tiagabine, Topiramate, Valproic Acid, Vigabatrin, Zonisamide)	3 x 5 x 1 ml
	LC05130	Deuterated Internal Standard Mix Solution in plasma (10,11-Dihydro-10-Hydroxycarbazepine-D3, Carbamazepine-D10, Ethosuximide-D3, Lacosamide-D3, Lamotrigine-13C3-D3, Levetiracetam-D6, Methsuximide-D5, Normesuximide(Desmethylsuximide)–D5, Oxcarbazepine-D4, Phelbamate-D4, Phenobarbital-D5, Pregabalin-D4, Primidone-D5, Stiripentol-D9, Tiagabine-D6, Topiramate-D12, Valproic Acid-D6, Zonisamide-D4)	1 x 55 ml
	Z699675902	Poroshell 120 EC C18 Analytical column ~ 1000 injections (50 x 2,1 mm - 1,9 µm)	1 Pc
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs

DRUGS FOR PANIC, ANXIETY OR MENTAL DISORDERS

INSIGHTS

Antidepressants are a class of medications used in emotional and mood disorders, which can evolve into psychosis and other symptoms such as anhedonia, self-devaluation, indecision, lack of appetite, hyperphagia, insomnia, hypersomnia, recurring thoughts of suicide or murderand somatization of pain. These drugs are divided into various classes according to their mechanism of action: - monoamine oxidase inhibitors, tricyclic antidepressants, selective serotonin reuptake inhibitors, serotonin and norepinephrine reuptake inhibitors, noradrenaline reuptake inhibitors, dopamine and noradrenaline reuptake inhibitors, dopamine reuptake inhibitors, serotonergic drugs, specific noradrenergic and serotonergic antidepressants, melatonergic drugs. Given the large number of antidepressants on the market and their increasing use, there is a need for physicians to monitor their plasma concentration in order to avoid episodes of overdose.

147	**LC84010**	**Antidepressants in serum and in plasma by LC/MS** (Amitriptyline, Citalopram and Escitalopram, Clomipramine, Desipramine, Desvenlafaxine, Doxepine, Duloxetine, Fluoxetine, Fluvoxamine, Imipramine, Norclomipramine, Nordoxepine, Norfluoxetine, Nortriptyline, Paroxetine, Sertraline, Venlafaxine)	**1 x 100 tests**
	SK84010	Starter Kit for Antidepressants in serum and in plasma in LC/MS	20 x 1 ml
	LC84011	Antidepressants in plasma by LC/MS – Mobile Phase M1	4 x 500 ml
	LC84021	Antidepressants in plasma by LC/MS – Mobile Phase M2	4 x 500 ml
	LC84016	Calibrator for Antidepressants in Plasma (Amitriptyline, Citalopram and Escitalopram, Clomipramine, Desipramine, Desvenlafaxine, Doxepine, Duloxetine, Fluoxetine, Fluvoxamine, Imipramine, Norclomipramine, Nordoxepine, Norfluoxetine, Nortriptyline, Paroxetine, Sertraline, Venlafaxine)	7 x 2 x 1 ml
	LC84019	Control for Antidepressants in Plasma - Levels 1, 2 and 3 (Amitriptyline, Citalopram and Escitalopram, Clomipramine, Desipramine, Desvenlafaxine, Doxepine, Duloxetine, Fluoxetine, Fluvoxamine, Imipramine, Norclomipramine, Nordoxepine, Norfluoxetine, Nortriptyline, Paroxetine, Sertraline, Venlafaxine)	3 x 5 x 1 ml
	LC84030	Deuterated Internal Standard Mix Solution in plasma (Clomipramine-D6, Fluoxetine-D5, Sertraline-D3)	1 x 30 ml
	Z699675902	Poroshell 120 EC - C18 (50 x 2,1mm - 1,9 µm) Analytical column ~ 1000 injections	1 Pc
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs

N°	Code	LC-MS/MS	Packaging
		INSIGHTS Antipsychotics (or neuroleptics) are drugs that act on the psyche, used in the therapy of psychoses, especially delusional and hallucinatory ones. Antipsychotics are also used, if strictly necessary, in hallucinatory disorders and neuromotor agitation states of non-psychotic diseases, such as dementia and some temporal brain tumors, or some leukodystrophies. Neuroleptic drugs are the cornerstone of psychosis therapy, which metabolic and interneuronal alterations in the central nervous system. A characteristic of psychosis therapy is that in most cases it should not be interrupted. In spite of their sedative effects, neuroleptics are not administered to sedate the patient or to make him sleep, but to control disorders of behavior and ideation, while reducing agitation and aggressiveness. Patients develop tolerance to the sedative effects of neuroleptics over time.	
148	**LC83010**	**Antipsychotics in serum and plasma by LC/MS** (Aripiprazole, Clozapine, Fluphenazine, Haloperidol, Norclozapine, Olanzapine, Paliperidone, Quetiapine, Risperidone, Ziprasidone)	**1 x 100 tests**
	SK83010	Starter Kit for Antipsychotics in plasma by LC/MS	13 x 1 ml
	LC83011	Antipsychotics in plasma by LC/MS - Mobile Phase M1	4 x 500 ml
	LC83021	Antipsychotics in plasma by LC/MS - Mobile Phase M2	4 x 500 ml
	LC83016	Calibrator for Antipsychotics in Plasma (Aripiprazole, Clozapine, Fluphenazine, Haloperidol, Norclozapine, Olanzapine, Paliperidone, Quetiapine, Risperidone, Ziprasidone)	7 x 2 x 1 ml
	LC83019	Control for Antipsychotics in Plasma - Levels 1, 2 and 3 (Aripiprazole, Clozapine, Fluphenazine, Haloperidol, Norclozapine, Olanzapine, Paliperidone, Quetiapine, Risperidone, Ziprasidone)	3 x 5 x 1 ml
	LC83030	Deuterated Internal Standard Mix Solution in plasma (Clozapine-D4, Olanzapine-D8, Risperidone-D4)	1 x 20 ml
	Z699675902	Poroshell 120 EC - C18 (50 x 2,1mm - 1,9 µm) Analytical column ~ 1000 injections	1 Pc
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
		INSIGHTS Benzodiazepines are elective drugs in the therapy of anxiety syndromes. Each benzodiazepine has different effects: anxiolytic,hypnotic, sedative, relaxant and anticonvulsive. All benzodiazepines are effective in episodes of anxiety and insomnia. The rapidity of the pharmacological activity depends on how fast the pharmacological concentrations are reached in the Central Nervous System (CNS). Treatment with benzodiazepines induces tolerance and addiction.	
149	**LC80210**	**Benzodiazepines in serum by LC/MS** (Bromazepam, Chlordemethyldiazepam, Chlordiazepoxide, Clobazam, Clonazepam, Demoxepam, Diazepam, Flunitrazepam, Flurazepam, Lorazepam, Midazolam, Nitrazepam, Norclobazam, Nordiazepam, Oxazepam, Trazodone, Triazolam, Zopiclon)	**1 x 100 tests**
	SK80210	Starter kit for Benzodiazepines in serum by LC/MS	32 x 1 ml
	LC80211	Benzodiazepines in serum by LC/MS - Mobile Phase M1	4 x 500 ml
	LC80221	Benzodiazepines in serum by LC/MS - Mobile Phase M2	4 x 500 ml
	LC80016	Calibrator for Benzodiazepines in serum (Bromazepam, Chlordemethyldiazepam, Chlordiazepoxide, Clobazam, Clonazepam, Demoxepam, Diazepam, Flunitrazepam, Lorazepam, Midazolam, Nitrazepam, Norclobazam, Nordiazepam, Trazodone, Zopiclon)	7 x 2 x 1 ml
	LC80019	Control for Benzodiazepines in serum - Levels 1, 2 and 3 (Bromazepam, Chlordemethyldiazepam, Chlordiazepoxide, Clobazam, Clonazepam, Demoxepam, Diazepam, Flunitrazepam, Lorazepam, Midazolam, Nitrazepam, Norclobazam, Nordiazepam, Trazodone, Zopiclon)	3 x 5 x 1 ml
	LC80230	Deuterated Internal Standard Mix Solution in serum (Bromazepam-D4, Chlordiazepoxide-D5, Clonazepam-D4, Demoxepam-D5, Diazepam-D5, Flunitrazepam-D7, Lorazepam-D4, Midazolam-D4, Nitrazepam-D5, Norclobazam-D5, Nordiazepam-D5, Oxazepam-D5, Triazolam-D4, Zopiclone-D8)	1 x 33 ml
	Z959757902	RRHD Eclipse Plus C18 Analytical column ~ 1000 injections (50 x 2,1 mm - 1,8 µm)	1 Pc
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs

N°	Code	LC-MS/MS	Packaging
		CHEMOTHERAPY DRUGS	
	UNIQUE	INSIGHTS Tamoxifen is an antitumor drug, belonging to the selective modulator class of estrogen receptors (SERM). The use of Tamoxifen is prescribed for breast cancer treatment and to prevent recurrence. In recent decades, Tamoxifen has been the most important therapeutic agent for the treatment of estrogen-receptor-positive breast cancers. Tamoxifen binds to the estrogen receptor by inhibiting the binding of estrogen and the subsequent proliferation of the tumor. The drug is metabolized in the liver from isoform CYP2D6 cytochrome P450, resulting in the formation of active metabolites, such as endoxifene and the 4-OH-tamoxifen. these molecules have the same binding affinity for the estrogen receptor ER-α and the same capacity to inhibit the proliferation of estrogen-dependent breast tumor cells that express this receptor.	
150	**LC92010**	**Tamoxifen, Endoxifen in plasma by LC/MS**	**1 x 100 tests**
	SK92010	Starter Kit for Tamoxifen, Endoxifen in plasma by LC/MS	3 x 1 ml
	LC92011	Tamoxifen, Endoxifen in plasma by LC/MS - Mobile Phase M1	4 x 500 ml
	LC92021	Tamoxifen, Endoxifen in plasma by LC/MS - Mobile Phase M2	4 x 500 ml
	LC92016	Calibrator for Tamoxifen, Endoxifen in plasma	5 x 2 x 1 ml
	LC92019	Control for Tamoxifen, Endoxifen in plasma - Levels 1 and 2	2 x 5 x 1 ml
	LC92030	Deuterated Internal Standard Solution in plasma (Endoxifene-D5)	1 x 40 ml
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	Z959793902	Analytical column Eclipse Plus C18 ~ 1000 injections (50 x 2,1 mm - 3,5 µm) for HPLC	1 Pc
	Z959757902	RRHD Eclipse Plus C18 Analytical column ~ 1000 injections (50 x 2,1 mm - 1,8 µm) for UHPLC	1 Pc
	UNIQUE	INSIGHTS Fluorouracil (5-FU) is considered the most efficient and most used antineoplastic agent for the treatment of gastrointestinal, breast and ovary tumors. 5-FU acts by antagonizing thymidylate synthase (TS). Its conversion to 5 -Fluoro - 2'deossi - 5'-monophosphate (FdUMP) leads to inhibition of TS thus blocking the synthesis of DNA and interrupting the whole transcriptional process and protein synthesis. The great efficacy of this drug, however, goes hand in hand with its low therapeutic index. 5-FU is catabolized primarily by the enzyme dihydropyrimidine dehydrogenase and patients with complete or partial functional deficiency of this enzyme are likely to develop side effects such as cardiac toxicity, myelosuppression and renal failure. This method allows to determine, ex-vivo, the rate of degradation of the drug 5-fluorouracil (5-FU). After purification of peripheral blood lymphocytes, the cells are incubated with a known amount of 5-FU, and the amount of drug metabolised after 2 hours is determined by LC-MS/MS. The present method allows the evaluation in a preventive manner of the rate of degradation of 5 - fluorouracil, in order to highlight the toxic risk to an individual before administration of the therapy.	
151	**LC85010**	**Degradation rate of 5-fluorouracil in Peripheral Blood Mononuclear Cell (PBMC) by LC-MS/MS** A Lymphocite counter is necessary!	**1 x 100 tests**
	SK85010	Starter Kit for 5-Fluorouracil in PBMC by LC-MS/MS	2 x 1 ml
	LC85011	5-Fluorouracil in PBMC by LC-MS/MS - Mobile Phase M1	4 x 500 ml
	LC85021	5-Fluorouracil in PBMC by LC-MS/MS - Mobile Phase M2	4 x 500 ml
	LC85016	Calibrator for 5-Fluorouracil in serum	7 x 2 x 1 ml
	LC85019	Control for 5-Fluorouracil in serum - Levels 1 and 2	2 x 5 x 1 ml
	ZA2001100X020	Polaris 3µ C18 Analytical column ~ 1000 injections (100 x 2 mm, 3 µm)	1 Pc
	51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	Z51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs

N°	Code	LC-MS/MS	Packaging
	UNIQUE	INSIGHTS Irinotecan is an antineoplastic chemotherapy drug of the class of camptothecins (drugs extracted from the bark of Camptotheca acuminata). Actually, Irinotecan is a pro drug. Its activation occurs at a hepatic level thanks to the transformation effected by the enzymecarboxesterase in SN 38. Irinotecan and SN 38 are then eliminated mainly through the bile. Therefore, the dosage should be reduced in patients with hepatic insufficiency.	
152	**LC94010**	**Irinotecan and 7-Ethyl-10-Hydroxycamptothecin (SN38) in serum and in plasma by LC/MS**	**1 x 100 tests**
	SK94010	Starter kit for Irinotecan/SN38 in serum and in plasma by LC-MS/MS	3 x 1 ml
	LC94011	Irinotecan/7-Ethyl-10-Hydroxycamptothecin (SN38) in serum and in plasma by LC/MS - Mobile Phase M1	4 x 500 ml
	LC94021	Irinotecan/7-Ethyl-10-Hydroxycamptothecin (SN38) in serum and in plasma by LC/MS - Mobile Phase M2	4 x 500 ml
	LC94016	Calibrator for Irinotecan/SN38 in plasma	5 x 2 x 1 ml
	LC94019	Control for Irinotecan/SN38 in plasma - Levels 1 and 2	2 x 5 x 1 ml
	LC94030	Deuterated Internal Standard Solution in plasma (Irinotecan-D10)	1 x 40 ml
	For HPLC systems		
	ZTF2500305213	Hypersil Gold Analytical column ~ 1000 injections (50 x 2.1 mm - 3.0 µm)	1 Pc
	For UHPLC systems		
	Z25002052130	Hypersil Gold Analytical column ~ 1000 injections (50 x 2.1 mm - 1.9 µm)	1 Pc
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	UNIQUE	INSIGHTS Ponatinib (Iclusig®), has been approved for the treatment of patients with Chronic Myeloid Leukemia (CSF) in the chronic, accelerated or blastic phase, resistant or intolerant to dasatinib or nilotinib and for whom subsequent treatment with imatinib is not clinically appropriate, or in whom the T315I mutation has been identified. Unfortunately, the clinical use of ponatinib is limited by the possible occurrence of occlusive vascular events (thrombosis and arterial and venous occlusions, including fatal myocardial infarction, stroke, stenosis of the large arterial vessels of the brain, severe peripheral vasculopathy). The Eureka Lab Division diagnostic KIT allows to constantly monitor the plasma concentrations of ponatinib during the therapy of each individual patient. Therefore, it represents for clinicians an important support tool, able to guarantee them the possibility of avoiding excessive plasma exposure to ponatinib that could cause thrombotic events.	
153	**LC99010**	**Ponatinib in plasma by LC/MS**	**1 x 100 tests**
	SK99010	Starter kit for Ponatinib in plasma	2 x 1 ml
	LC99011	Ponatinib in plasma - Mobile Phase M1	4 x 500 ml
	LC99021	Ponatinib in plasma - Mobile Phase M2	4 x 500 ml
	LC99016	Calibrator for Ponatinib in plasma	7 x 2 x 1 ml
	LC99019	Control for Ponatinib in plasma – Levels 1, 2 and 3	3 x 5 x 1 ml
	LC99030	Deuterated Internal Standard Solution in plasma (Ponatinib-D8)	1 x 40 ml
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	For UHPLC systems		
	Z959757902	Zorbax RRHD C18 Analytical column ~ 1000 injections (50 x 2,1 mm –1,8 µm)	1 Pc
	For HPLC systems		
	Z959793902	Eclipse Plus C18 Analytical column ~ 1000 injections (100 x 2,1 mm –3,5 µm)	1 Pc

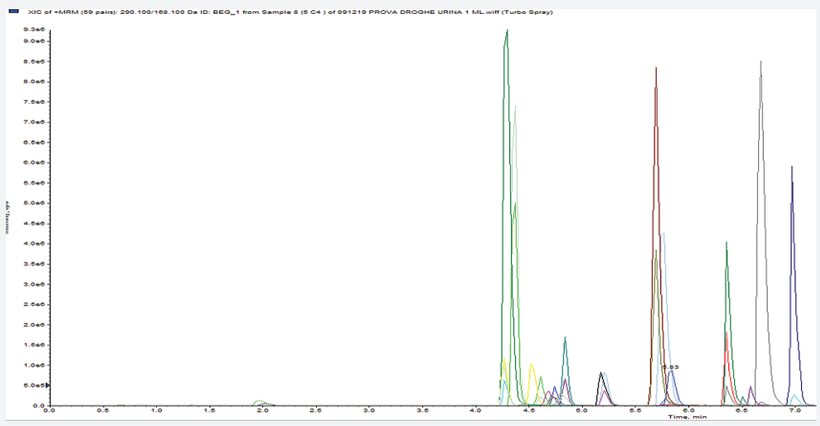
OCCUPATIONAL TOXICOLOGY

N°	Code	LC-MS/MS	Packaging
	NEW UNIQUE	INSIGHTS The measuring of t,t- Muconic Acid is suggested as a reliable biological marker for monitoring workers exposed to benzene. Benzene is an industrial chemical product which often appears in mineral oils following combustion processes. For this reason, there is a high risk of environmental pollution. Acute exposure to benzene can cause drowsiness, dizziness, rapid heart rate, headaches, tremors, confusion, unconsciousness and death.	
154	**LC23010**	**t,t Muconic Acid and S-Phenylmercapturic Acid in urine by LC/MS**	**1 x 100 tests**
	SK23010	Starter Kit for t,t Muconic Acid and S- Phenylmercapturic Acid in urine by LC/MS	4 x 1 ml
	LC23011	t,t Muconic Acid and S-Phenylmercapturic Acid in urine by LC/MS - Mobile Phase M1	4 x 500 ml
	LC23021	t,t Muconic Acid and S-Phenylmercapturic Acid in urine by LC/MS - Mobile Phase M2	4 x 500 ml
	LC23016	Calibrator for t,t Muconic Acid and S-Phenylmercapturic Acid in urine	6 x 2 x 1 ml
	LC23019	Control for t,t Muconic Acid and S-Phenylmercapturic Acid in urine - Levels 1 and 2	2 x 5 x 1 ml
	LC23030	Deuterated Internal Standard Mix Solution in urine (s-Phenylmercapturic Acid -D5, t,t-Muconic Acid -13C6)	1 x 10 ml
	S695970902	Phoroshell 120 EC-C18 Analytical column ~ 1000 injections (4 µm, 4.6 x 100 mm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs

FORENSIC TOXICOLOGY

N°	Code	LC-MS/MS	Packaging
	NEW	INSIGHTS Benzodiazepines are a class of psychoactive drugs. Barbiturates are sedative-hypnotics, a type of central nervous system (CNS) depressant. They are currently used to treat: Anxiety, Seizures, Insomnia, Agitation. They may also be used for procedural sedation. They induce addiction and lead to high incidence of overdose worldwide. The toxic effects of benzodiazepine and barbiturate overdose include: respiratory depression, Central Nervous System (CNS) depression, death. The Eureka kit LC80310 is intended to determine benzodiazepine and barbiturate intoxication.	
155	**LC80310**	**Benzodiazepines and Barbiturates in urine by LC-MS/MS · CONFIRMATION KIT** Allobarbital, Alprazolam, Amobarbital, Barbital, Bromazepam, Butalbital, Cathinone, Clobazam, Clonazepam, Cocaethylene, Diazepam, Hexobarbital, Fentanyl, Flunitrazepam, Hydroxy-alprazolam, Hydroxy-bromazepam, Lorazepam, Lormetazepam, LSD, Mescaline, Nordiazepam, Norketamine, Oxazepam, Pentobarbital, Secbutarbital, Secobarbital, Temazepam, Thiopental	**1 x 100 tests**
		IFU	
	SK80310	Starter kit for Benzodiazepines and Barbiturates in urine by LC-MS/MS	33 x 1 ml
	LC80311	Benzodiazepines and Barbiturates in urine by LC-MS/MS - Mobile Phase M1	4 x 500 ml
	LC80321	Benzodiazepines and Barbiturates in urine by LC-MS/MS - Mobile Phase M2	4 x 500 ml
	LC80316	Calibrator for Benzodiazepines and Barbiturates in urine (Allobarbital, Alprazolam, Amobarbital, Barbital, Bromazepam, Butalbital, Cathinone, Clobazam, Clonazepam, Cocaethylene, Diazepam, Fentanyl, Flunitrazepam, Hexobarbital, OH-Alprazolam, OH-Bromazepam, Lorazepam, Lormetazepam, LSD, Mescaline, Nordiazepam, Norketamine, Oxazepam, Pentobarbital, Secbutarbital, Secobarbital, Temazepam, Thiopental)	4 x 2 x 1 ml
	LC80319	Control for Benzodiazepines and Barbiturates in urine – Levels 1 and 2 (Allobarbital, Alprazolam, Amobarbital, Barbital, Bromazepam, Butalbital, Cathinone, Clobazam, Clonazepam, Cocaethylene, Diazepam, Fentanyl, Flunitrazepam, Hexobarbital, OH-Alprazolam, OH-Bromazepam, Lorazepam, Lormetazepam, LSD, Mescaline, Nordiazepam, Norketamine, Oxazepam, Pentobarbital, Secbutarbital, Secobarbital, Temazepam, Thiopental)	2 x 5 x 1 ml
	LC80330	Deuterated Internal Standard mix Solution in urine (Bromazepam-D4, Clonazepam-D4, Diazepam-D5, Lorazepam-D4, Oxazepam-D5)	1 x 2 ml
	Z959757902	RRHD Eclipse Plus C18 Analytical Column ~1000 injections (50 x 2,1 mm - 1,8 µm) for UHPLC	1 Pc
	S29057U	Standard glass vials of 2 ml with screw caps	1 x 100 Pcs

N°	Code	LC-MS/MS	Packaging
		DRUGS OF ABUSE IN URINE	
		INSIGHTS Determination of substances of abuse in biological liquids is generally performed using immunometric techniques which are based on the Antigen-Antibody reaction. These methods are considered as screening. Since such techniques cannot exclude false positives, positive results have to be confirmed with alternative techniques, usually Gas Chromatography (GC) or Liquid Chromatography (LC), both coupled with Mass Spectrometer (MS).	
156	**LC74010**	**Drugs of Abuse in urine by LC/MS (Preparation for homologous compounds) · CONFIRMATION KIT** (3,4-MDA, 3,4-MDE, 3,4-MDMA, 6-MAM, Amphetamine, Benzoylecgonine, Buprenorphine, Cocaethylene, Cocaine, Codeine, delta-9-THC-COOH, Dihydrocodeine, EDDP, Ephedrine, Ethylmorphine, Ketamine, MBDB, Methamphetamine, Methadone, Morphine, Norbuprenorphine, Norpseudoephedrine, Pseudoephedrine)	**1 x 100 tests**
	SK74010	Starter kit for Drugs of Abuse in urine by LC/MS	30 x 1 ml
	LC74011	Drugs of Abuse in urine by LC/MS - Mobile Phase M1	4 x 500 ml
	LC74021	Drugs of Abuse in urine by LC/MS - Mobile Phase M2	4 x 500 ml
	CC43016	Calibrator for Amphetamines in urine (3,4-MDA, 3,4-MDE, 3,4-MDMA, Amphetamine, Ephedrine, Ketamine, MBDB, Methamphetamine, Norpseudoephedrine, Pseudoephedrine)	5 x 2 x 5 ml
	CC44016	Calibrator for Norbuprenorphine and Buprenorphine in urine	5 x 2 x 6 ml
	CC45016	Calibrator for Opiates in urine (Codeine, Dihydrocodeine, Ethylmorphine, Morphine)	5 x 2 x 5 ml
	CC45116	Calibrator for 6-Monoacetylmorphine in urine	5 x 2 x 5 ml
	CC46016	Calibrator for Benzoylecgonine and Cocaethylene in urine	5 x 2 x 5 ml
	CC46116	Calibrator for Cocaine in urine	5 x 2 x 5 ml
	CC47016	Calibrator for delta-9-THC-COOH in urine	5 x 2 x 10 ml
	CC48016	Calibrator for Methadone in urine	5 x 2 x 5 ml
	CC48116	Calibrator for EDDP in urine	5 x 2 x 5 ml
	CC43019	Multiparametric Control for Drugs of Abuse in urine - Levels 1 and 2 (3,4-MDA, 3,4-MDE, 3,4-MDMA, Amphetamine, Benzoylecgonine, Cocaethylene MBDB, Ephedrine, Ketamine, MBDB, Methamphetamine, Norpseudoephedrine, Pseudoephedrine)	2 x 6 x 5 ml
	CC44019	Control for Norbuprenorphine and Buprenorphine in urine - Levels 1 and 2	2 x 6 x 6 ml
	CC45019	Control for Opiates in urine - Levels 1 and 2 (Codeine, Dihydrocodeine, Ethylmorphine, Morphine)	2 x 6 x 5 ml
	CC47019	Control for delta-9-THC-COOH in urine - Levels 1 and 2	2 x 6 x 10 ml
	CC48019	Control for EDDP, 6-Monoacetylmorphine and cocaine in urine - Levels 1 and 2	2 x 6 x 5 ml
	LC74030	Deuterated Internal Standard Mix Solution in urine (Amphetamine-D11, Beg-D8, Cocaine-D3, EDDP-D3, MDA-D5, MDE-D5, MDMA-D5, Methamphetamine-D11, Methadone-D9)	1 x 200 ul
	LC74130	Deuterated Internal Standard Mix Solution in urine (6-MAM-D6, Codeine-D6, Morphine-D6, Norbuprenorphine-D3)	1 x 500 ul
	LC74330	Deuterated Internal Standard Solution in urine (Δ9-THC-COOH – D9)	1 x 200 ul
	ZTF17126032130	ACCUCORE C 18 Analytical column ~ 1000 injections (30 x 2,1 mm - 2,6 µm) for HPLC	1 Pc
	Z959757902	RRHD Eclipse Plus C18 Analytical column ~ 1000 injections (50 x 2,1 mm - 1,8 µm) for UHPLC	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hidrolysis, till 300 °C-washable and reusable)	1 x 40 Pcs



N°	Code	LC-MS/MS	Packaging
157	**LC74210**	**Drugs of Abuse in urine by LC/MS (One preparation for all) · CONFIRMATION KIT** (Amphetamine, Methamphetamine, 3,4-MDMA, 3,4-MDA, 3,4-MDE, MBDB, Ketamine, Ephedrine, Pseudoephedrine, Norpseudoephedrine, Morphine, 6-MAM, Codeine, Dihydrocodeine, Beg, Cocaine, Methadone, EDDP, Norbuprenorphine, delta-9-THC-COOH, Buprenorphine)	**1 x 100 tests**
	SK74210	Starter kit for Drugs of Abuse in urine by LC/MS	36 x 1 ml
	LC74011	Drugs of Abuse in urine by LC/MS - Mobile Phase M1	4 x 500 ml
	LC74021	Drugs of Abuse in urine by LC/MS - Mobile Phase M2	4 x 500 ml
	LC74016	Multiparametric Calibrator for Drugs of Abuse in urine (Amphetamine, Methamphetamine, 3,4-MDMA, 3,4-MDA, 3,4-MDE, MBDB, Ketamine, Ephedrine, Pseudoephedrine, Norpseudoephedrine, Morphine, 6-MAM, Codeine, Dihydrocodeine, Beg, Cocaine, Methadone, EDDP, Norbuprenorphine, delta-9-THC-COOH, Buprenorphine)	5 x 2 x 1 ml
	LC74019	Multiparametric Control for Drugs of Abuse in urine – Levels 1 and 2 (Amphetamine, Methamphetamine, 3,4-MDMA, 3,4-MDA, 3,4-MDE, MBDB, Ketamine, Ephedrine, Pseudoephedrine, Norpseudoephedrine, Morphine, 6-MAM, Codeine, Dihydrocodeine, Beg, Cocaine, Methadone, EDDP, Norbuprenorphine, delta-9-THC-COOH, Buprenorphine)	2 x 5 x 1 ml
	LC74230	Deuterated Internal Standard Mix Solution in urine (6MAM-D6, Amphetamine-D11, BEG-D8, Cocaine-D3, Codeine-D6, EDDP-D3, MDA-D5, MDE-D5, MDMA-D5, Methadone-D9, Methamphetamine-D11, Morphine-D6, Norbuprenorphine-D3, THC- COOH-D9, Buprenorphine D4)	1 x 2 ml
	Z959757902	RRHD Eclipse Plus C18 Analytical column ~ 1000 injections (50 x 2,1 mm - 1,8 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs

INSIGHTS

Ethyl glucuronide is a non-volatile molecule, polar, relatively stable and formed by conjugation of Ethanol with Glucuronic Acid with mediation of UDP-glucuronyl-transferase (UGT), a superfamily of highly polymorphic enzymes. The Ethylglucuronide seems to be synthesized by various isoforms with UGT function. The lack of one of these isoforms in an individual, does not indicate significant variations in the formation of Ethyl glucuronide. Therefore, individuals belonging to different ethnic groups, most likely synthetize the same percentage of the compound after Alcohol consumption. It has been estimated that only 0.02-0.06 % of Ethanol consumed is transformed into Ethyl glucuronide.

158	**LC78010**	**Ethylglucuronide and Ethylsulfate in urine by LC/MS · CONFIRMATION KIT**	**1 x 100 tests**
	SK78010	Starter kit for Ethylglucuronide and Ethylsulfate in urine by LC/MS	4 x 1 ml
	LC78011	Ethylglucuronide and Ethylsulfate in urine by LC/MS - Mobile Phase M1	4 x 500 ml
	LC78021	Ethylglucuronide and Ethylsulfate in urine by LC/MS - Mobile Phase M2	4 x 500 ml
	LC78016	Calibrator for Ethylglucuronide and Ethylsulfate in urine	5 x 2 x 1 ml
	LC78019	Control for Ethylglucuronide and Ethylsulfate in urine - Levels 1 and 2	2 x 5 x 1 ml
	LC78030	Deuterated Internal Standard Solution in urine (Ethylglucuronide-D5)	1 x 2,5 ml
	LC78130	Deuterated Internal Standard Solution in urine (Ethylsulfate-D5)	1 x 2,5 ml
	ZA2001100X020	Polaris 3µ C18 Analytical column ~ 1000 injections (100 x 2 mm, 3 µm)	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs

N°	Code	LC-MS/MS	Packaging
		DRUGS OF ABUSE IN HAIR	
	UNIQUE	INSIGHTS Testing hair for substances is used to prove prolonged use, abuse and misuse of such substances to characterize intensity and history. This gives analytical data with medical and legal value. Hair analysis of such substances can be requested in case of death related to substance abuse, evaluation of suitability for driving, criminal responsibility, custody of minors, prenatal exposure to substances and lastly to confirm sporadic consumption in work involving high risk activities.	
159	**LC49010**	**Drugs of Abuse in hair by LC/MS** **· CONFIRMATION KIT** (3,4-MDA, 3,4-MDE, 3,4-MDMA, 6-MAM, Amphetamine, Benzoylecgonine, Buprenorphine, Cocaethylene, Cocaine, Codeine, Ecgonine Methyl Ester, EDDP, MBDB, Methamphetamine, Methadone, Morphine, Norbuprenorphine)	**1 x 50 tests**
	SK49010	Starter kit for Drugs of Abuse in hair by LC/MS	32 x 1 ml
	LC49011	Drugs of Abuse in hair by LC/MS - Mobile Phase M1	4 x 500 ml
	LC49021	Drugs of Abuse in hair by LC/MS - Mobile Phase M2	4 x 500 ml
	CC49016	Calibrator for Drugs of Abuse in hair (3,4-MDA, 3,4-MDE, 3,4-MDMA, 6-MAM, Amphetamine, Benzoylecgonine, Buprenorphine, Cocaethylene, Cocaine, Codeine, Ecgonine Methyl Ester, EDDP, MBDB, Methamphetamine, Methadone, Morphine, Norbuprenorphine)	1 x 2000 mg/ 1 x 2 x 0,5 ml/ 1 x 25 ml
	CC49019	Control for Drugs of Abuse in hair - Levels 1 and 2 (3,4-MDA, 3,4-MDE, 3,4-MDMA, 6-MAM, Amphetamine, Benzoylecgonine, Buprenorphine, Cocaethylene, Cocaine, Codeine, Ecgonine Methyl Ester, EDDP, MBDB, Methamphetamine, Methadone, Morphine, Norbuprenorphine)	1 x 1500 mg/ 1 x 2 x 0,4 ml/ 1 x 25 ml
	LC49030	Deuterated Internal Standard Mix Solution in hair (6-MAM-D6, Amphetamine-D11, BEG-D8, Buprenorphine-D4, Cocaethylene-D3, Cocaine-D3, Codeine-D6, EDDP-D3, MDA-D5, MDE-D5, MDMA-D5, Methadone-D9, Methamphetamine-D11, Morphine-D6, Norbuprenorphine-D3)	1 x 300 ul
	ZTF17126032130	ACCUCORE C18 Analytical column ~ 1000 injections (30 x 2,1 mm - 2,6 µm) for HPLC	1 Pc
	Z959757902	RRHD Eclipse Plus C18 Analytical column ~ 1000 injections (50 x 2,1 mm - 1,8 µm) for UHPLC	1 Pc
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs
	UNIQUE	INSIGHTS Delta-9-TetraCannabinol (commonly called THC, Delta-9-THC or Tetrahydrocannabinol) is one of the main and best known active principles of cannabis. It is a psychotropic substance produced by cannabis flowers, it can be ingested and most commonly smoked. It has pain-killing properties (sometimes used as treatment for pain), causes euphoria, anti-nausea, antiemetic, can stimulate appetites and reduce intraocular pressure and aggressiveness.	
160	**LC53010**	**Delta-9-THC and Delta 9 THC-COOH in hair by LC/MS** Important: need an evaporation system!	**1 x 50 tests**
	SK53010	Starter kit for Delta-9-THC and Delta 9 THC-COOH in hair by LC/MS	4 x 1 ml
	LC53011	Delta-9-THC and Delta 9 THC-COOH in hair by LC/MS - Mobile Phase M1	4 x 500 ml
	LC53021	Delta-9-THC and Delta 9 THC-COOH in hair by LC/MS - Mobile Phase M2	4 x 500 ml
	CC53016	Calibrator for Delta-9-THC and Delta 9 THC-COOH in hair by LC/MS	1 x 2000 mg/ 1 x 0,5 ml/ 1 x 10 ml
	CC53019	Control for Delta-9-THC and Delta 9 THC-COOH in hair by LC/MS - Levels 1 and 2	1 x 1000 mg/ 1 x 0,5 ml/ 1 x 12,5 ml
	LC53030	Deuterated Internal Standard Mix Solution in hair (Δ9-THC-COOH-D9, Δ9-THC-D3)	1 x 200 ul
	ZTF17126032130	ACCUCORE C18 Analytical column ~ 1000 injections (30 x 2,1 mm, 2,6 µm) for HPLC	1 Pc
	Z959757902	RRHD Eclipse Plus C18 Analytical column ~ 1000 injections (50 x 2,1 mm - 1,8 µm) for UHPLC	1 Pc
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs

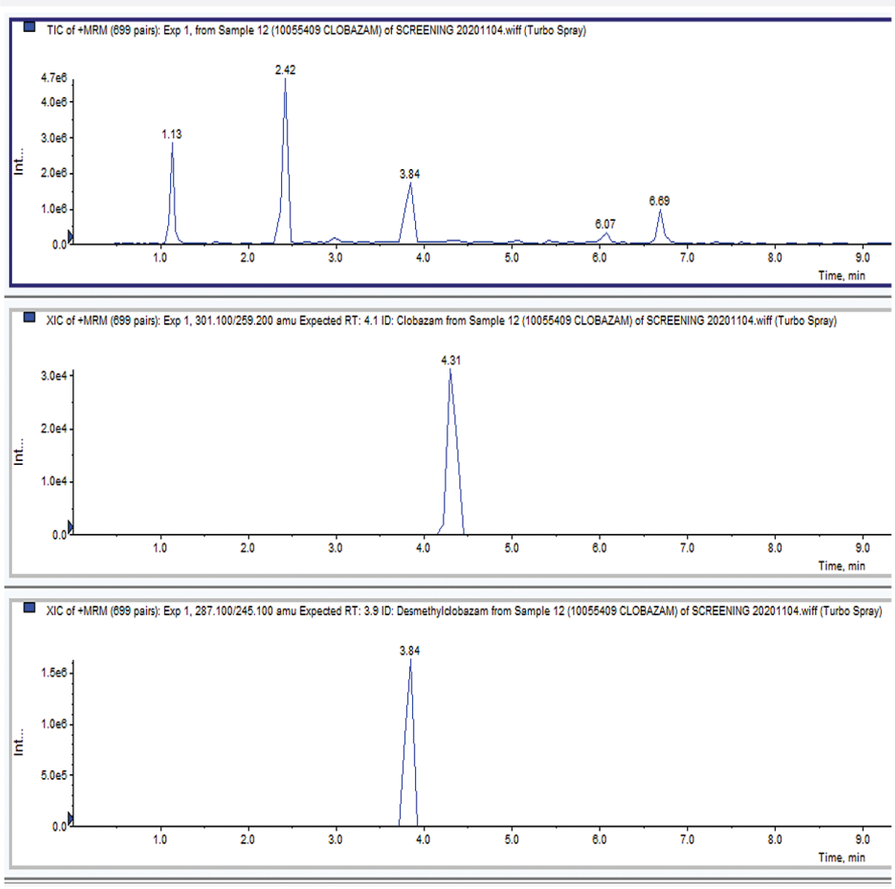
N°	Code	LC-MS/MS	Packaging
		INSIGHTS Ethyl glucuronide is a non-volatile molecule, polar, relatively stable and formed by conjugation of Ethanol with Glucuronic Acid with mediation of UDP-glucuronyl-transferase (UGT), a superfamily of highly polymorphic enzymes. The Ethylglucuronide seems to be synthesized by various isoforms with UGT function. The lack of one of these isoforms in an individual, does not indicate significant variations in the formation of Ethyl glucuronide. Therefore, individuals belonging to different ethnic groups, most likely synthetize the same percentage of the compound after Alcohol consumption. It has been estimated that only 0.02-0.06 % of Ethanol consumed is transformed into Ethyl glucuronide.	
161	**LC95010**	**Ethylglucuronide in hair by LC/MS · CONFIRMATION KIT** An ultrasonic bath is necessary!	**1 x 50 tests**
	SK95010	Starter Kit for Ethylglucuronide in hair by LC/MS	2 x 1 ml
	LC95011	Ethylglucuronide in hair by LC/MS - Mobile Phase M1	4 x 500 ml
	LC95021	Ethylglucuronide in hair by LC/MS - Mobile Phase M2	4 x 500 ml
	LC95016	Calibrator for Ethylglucuronide in hair	1 x 4000 mg/ 6 x 250 ul
	LC95019	Control for Ethylglucuronide in hair - Levels 1 and 2	1 x 4000 mg/ 2 x 250 ul
	LC95030	Deuterated Internal Standard Solution in hair (Ethylglucuronide-D5)	1 x 150 ul
	ZA2001100X020	Polaris 3µ C18 (100 x 2 mm - 3 µm) Analytical column ~ 1000 injections	1 Pc
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	Z1636/26	10 ml Pyrex Tubes with cap SWL (for hydrolysis, till 300°C - washable and reusable)	1 x 40 Pcs

N°	Code	LC-MS/MS	Packaging
		DRUGS OF ABUSE IN WHOLE BLOOD	
	UPGRADE	Detection of an additional analyte (Fentanyl)	
162	**LC89010**	**Drugs of abuse in whole blood by LC-MS/MS · CONFIRMATION KIT** (6-Monoacetylmorphine (6-MAM), 11-OH-THC, Amphetamine, Benzoylecgonine (BEG), Buprenorphine, Cocaethylene, Cocaine, Codeine, Δ9-THC, Δ9-THC-COOH, Ecgonine Methylester, EDDP, **Fentanyl**, Ketamine, MBDB, MDA, MDE, MDMA, Methadone, Methamphetamine, Morphine, Norbuprenorphine)	**1 x 100 tests**
		IFU	
	SK89010	Starter kit for Drugs of Abuse in whole blood by LC-MS/MS	39 x 1 ml
	LC89011	Drugs of Abuse in whole blood by LC-MS/MS - Mobile Phase M1	4 x 500 m
	LC89021	Drugs of Abuse in whole blood by LC-MS/MS - Mobile Phase M2	4 x 500 m
	LC89016	Calibrator for Drugs of Abuse in whole blood (3,4-MDMA, 3,4-MDA, 3,4-MDE, Amphetamine, Methamphetamine, Ketamine, Morphine, Codeine, 6-Monoacethylmorphine, Beg, Cocaethylene, Methadone, Cocaine, EDDP, Norbuprenorphine,Buprenorphine, MBDB, Ecgonine Methyl Ester, Fentanyl, Delta-9-THC, Delta-9-THC-COOH, 11-OH-THC)	7 x 2 x 1 ml
	LC89019	Control for Drugs of Abuse in whole blood – Levels 1, 2 and 3 (3,4-MDMA, 3,4-MDA, 3,4-MDE, Amphetamine, Methamphetamine, Ketamine, Morphine, Codeine, 6-Monoacethylmorphine, Beg, Cocaethylene, Methadone, Cocaine, EDDP, Norbuprenorphine,Buprenorphine, MBDB, Ecgonine Methyl Ester, Fentanyl, Delta-9-THC, Delta-9-THC-COOH, 11-OH-THC)	3 x 5 x 1 ml
	LC89030	Deuterated Internal Standard Mix Solution in whole blood (Morphine-D6, 11-OH-THC-D3, 6 MAM-D6, Amphetamine-D11, BEG-D8, Cocaethylene-D3, Cocaine-D3, Codeine-D6, EDDP-D3, MDA-D5, MDE-D5, MDMA-D5, Methadone-D9, Methanphetamine-D11, Norbuprenorphine-D3, THC COOH-D9, THC-D3)	1 x 300 µl
	Z959757902	RRHD C 18 Analytical Column ~1000 injections (50 x 2,1 mm – 1,8 µm)	1 Pc
	TF2540301201	Hypersil Gold PFP Prefilters (10 x 2,1 mm – 3 µm)	1 x 4 Pcs
	TF84200	2 mm Drop in Holder (goblet form)	1 Pc
	S51843550	Glass vials with reduced volume from 1,5 ml to 15 µl	1 x 100 Pcs
	S51820717	Caps for Glass vials with reduced volume from 1,5 ml to 15 µl and for amber vials	1 x 100 Pcs
	L-30-210	Eppendorf tubes by 1,5 ml with caps	1 x 1000 Pcs

N°	Code	LC/MS	Packaging
		OTHER MATRICES	
	NEW UNIQUE		
163	**LC98010**	**Drugs of Abuse in saliva by LC/MS · CONFIRMATION KIT** (3,4-MDA, 3,4-MDE, 3,4-MDMA, 6-MAM, Amphetamine, Benzoylecgonine, Buprenorphine, Cocaethylene, Cocaine, Codeine, delta-9-THC, EDDP, Ketamina, MBDB, Methamphetamine, Methadone, Morphine)	**1 x 100 tests**
	SK98010	Starter Kit for Drugs of Abuse in Saliva by LC/MS	32 x 1 ml
	LC98011	Drugs of Abuse in Saliva by LC/MS - Mobile Phase M1	4 x 500 ml
	LC98021	Drugs of Abuse in Saliva by LC/MS - Mobile Phase M2	4 x 500 ml
	LC98016	Calibrator for Drugs of Abuse in Saliva (6-MAM, Cocaine, Benzoylecgonine, delta-9-THC, Buprenorphine, Morphine, Codeine, Amphetamine, Methamphetamine, 3,4-MDA, 3,4-MDE, 3,4-MDMA, Ketamina, MBDB, Methadone, EDDP, Cocaethylene)	7 x 1 x 300 µl
	LC98019	Control for Drugs of Abuse in Saliva - Levels 1 and 2 (Morphine, Codeine, 6-MAM, Cocaine, Benzoylecgonine (Ketamina, , delta-9-THC, Buprenorphine, Amphetamine, Methamphetamine, 3,4-MDA, 3,4-MDE, 3,4-MDMA, MBDB, Methadone, EDDP, Cocaethylene)	2 x 1 x 300 µl
	LC98030	Deuterated Internal Standard Mix Solution in saliva (6 MAM-D6, Amphetamine-D11, BEG-D8, Buprenorphine-D4, Cocaethylene-D3, Cocaine-D3, Codeine-D6, EDDP-D3, MDA-D5, MDE-D5, MDMA-D5, Methadone-D9, Methamphetamine-D11, Morphine-D6, THC-D3)	1 x 30 ml
	W98011	Needle Wash Drugs of Abuse by LC/MS	4 x 500 ml
	ZTF25402052130	Hypersil GOLD PFP Analytical column ~ 1000 injections (50 x 2,1mm x 1,9 µm)	1 Pc
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	UNIQUE		
164	**SC1000**	**Fast screening kit of 1st level for tabelled Drugs of Abuse in urine/hair/ whole blood by LC/MS** (11-OH-THC, 3,4-MDA, 3,4-MDE, 3,4-MDMA, 6-Monoacetylmorphine, Amphetamine, Benzoylecgonine, Buprenorphine delta-9-THC-COOH, Buprenorphine glucuronide, Cocaethylene, Cocaine, Codeine, Codeine-6-beta-glucuronide, Dihydrocodeine, Ecgonine Methyl Ester, EDDP, Ketamine, MBDB, Methamphetamine, Methadone, Morphine, Morphine-3-beta-glucuronide, Morphine-6-beta-glucuronide, Norbuprenorphine, Norbuprenorphine glucuronide, Oxicodone, THC-COOH glucuronide)	**1 x 200 tests**
	SK1000	Starter kit for tabelled Drugs of Abuse	35 x 1 ml
	SC1011	Fast Screening kit of 1st level for tabelled Drugs of Abuse - Mobile Phase M1	4 x 500 ml
	SC1021	Fast Screening kit of 1st level for tabelled Drugs of Abuse - Mobile Phase M2	4 x 500 ml
	SC1006U	Calibrator in urine for Tabelled Drugs of Abuse Screening	4 x 1 ml
	SC1009U	Control in urine for Tabelled Drugs of Abuse Screening - Levels 1 and 2	2 x 5 x 1 ml
	SC1006H	Calibrator in hair for Tabelled Drugs of Abuse Screening	1 x 1000 mg/ 1 x 3 x 0,5 ml
	SC1009H	Control in hair for Tabelled Drugs of Abuse - Levels 1 and 2	1 x 1500 mg/ 1 x 3 x 0,4 ml/ 1 x 25 ml
	SC1006B	Calibrator in whole blood for Tabelled Drugs of Abuse Screening	4 x 1 ml
	SC1009B	Control in whole blood for Tabelled Drugs of Abuse Screening - Levels 1 and 2	2 x 5 x 1 ml
	Z1636/26	10 ml Pyrex tubes with cap SWL (for hydrolysis, till 300°C-washable and reusable)	1 x 40 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	TF25402052130	Hypersil GOLD PFP Analytical column ~ 1000 injections (50 x 2,1 mm -1,9 µm)	1 Pc

N°	Code	LC/MS	Packaging
	UNIQUE	INSIGHTS The kit for toxicological forensic analysis is a method for screening 700 molecules of pharmacological and toxicological interest- They include drugs and antyephilectis, antidepressants and benzodiazepines, substances of abuse such as opioids, cannabinoids and cocaine. The matrices are urine, plasma and whole blood. The sample preparation procedure is very simple and quick for all of the matrices which have been considered.	
165	**SC9000**	**Fast Toxicological Screening kit in urine, plasma and whole blood - Sciex ~ 1000 molecules**	**1 x 200 tests**
166	**SC9005**	**Fast Toxicological Screening kit in urine, plasma and whole blood - Sciex ~ 1000 molecules**	**1 x 500 tests**
	SC9011	Fast Toxicological Screening - Mobile Phase M1	4 x 500 ml
	SC9021	Fast Toxicological Screening - Mobile Phase M2	4 x 500 ml
	SK9001	Peek Tubing set	1 Pc
	SRE9169552	ALLURE PFPP Analytical column ~ 1000 injections (50 x 2,1 mm - 5 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs
	UNIQUE		
167	**SC9000B**	**Fast Toxicological Screening kit in plasma and whole blood - Sciex ~ 1000 molecules**	**1 x 200 tests**
168	**SC9005B**	**Fast Toxicological Screening kit in plasma and whole blood - Sciex ~ 1000 molecules**	**1 x 500 tests**
	SC9011	Fast Screening of Toxicology - Mobile Phase M1	4 x 500 ml
	SC9021	Fast Screening of Toxicology - Mobile Phase M2	4 x 500 ml
	SK9001	Peek Tubing set	1 Pc
	SRE9169552	ALLURE PFPP Analytical column ~ 1000 injections (50 x 2,1 mm - 5 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs

N°	Code	LC-MS/MS	Packaging
169	**SC9000U**	**Fast Toxicological Screening Kit in urine - Sciex ~ 1000 molecules**	**1 x 200 tests**
170	**SC9005U**	**Fast Toxicological Screening Kit in urine - Sciex ~ 1000 molecules**	**1 x 500 tests**
	SC9011	Fast Toxicological Screening - Mobile Phase M1	4 x 500 ml
	SC9021	Fast Toxicological Screening - Mobile Phase M2	4 x 500 ml
	SK9001	Peek tubing set	1 Pc
	SRE9169552	ALLURE PFPP Analytical column ~ 1000 injections (50 x 2,1 mm - 5 µm)	1 Pc
	S90199511	Javelin Prefilter (Analytical column protection)	1 x 10 Pcs
	S51843550	Clear glass vials with reduced volume goblet form from 15 µl to 1,5 ml	1 x 100 Pcs
	S51820717	Caps for glass vials with reduced volume goblet form from 15 µl to 1,5 ml and for amber vials	1 x 100 Pcs



N°	Code	LC-MS/MS	Packaging
	UNIQUE	INSIGHTS The objective of this method is to titrate the concentrations of certain forms of cannabinoids present in galenic oil production. The pharmacist shall prepare in the pharmacy magistral cannabis-based preparations in compliance with the NBP. In order to ensure the quality of the product, the titration of the active substance(s) must be carried out for each herbal preparation by sensitive and specific methods such as liquid or gas chromatography coupled with mass spectrometry and the extraction method must be authorised in accordance with current legislation.	
171	LC88810	**Oleolites (Phytocannabinoids for therapeutic use) by LC/MS** (THC: Tetrahydrocannabinol.- CBD: Cannabidiol- CBN: Cannabinol,- CBG: Cannabigerol THCA: Tetrahydrocannabinolic Acid - CBDA: Cannabidiolic Acid - THCV: Tetrahydrocannabivarin)	**1 x 100 tests**
	SK88810	Starter Kit for Oleolites Phytocannabinoids for Therapeutic use	10 x 1 ml
	LC88811	Oleolites Phytocannabinoids for Therapeutic use – Mobile Phase M1	4 x 500 ml
	LC88821	Oleolites Phytocannabinoids for Therapeutic use – Mobile Phase M2	4 x 500 ml
	LC88816	Calibrator for Oleolites Phytocannabinoids for Therapeutic use (THC: Tetrahydrocannabinol.- CBD: Cannabidiol- CBN: Cannabinol,- CBG: Cannabigerol THCA: Tetrahydrocannabinolic Acid - CBDA: Cannabidiolic Acid - THCV: Tetrahydrocannabivarin)	6 x 2 x 300 µl
	LC88819	Controls for Oleolites Phytocannabinoids for Therapeutic use - Levels 1 and 2 (THC: Tetrahydrocannabinol.- CBD: Cannabidiol- CBN: Cannabinol,- CBG: Cannabigerol THCA: Tetrahydrocannabinolic Acid - CBDA: Cannabidiolic Acid - THCV: Tetrahydrocannabivarin)	2 x 1 x 500 µl
	LC88830	Deuterated Internal Standard Mix Solution in oil (Cannabidiol-D3, Cannabinol-D3, THC-D3)	1 x 100 ml
	TF25402052130	Hypersil GOLD PFP Analytical column ~ 1000 injections (50 x 2,1mm x 1,9 µm)	1 Pc
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs
	Z1636/26	10 ml Pyrex tubes with cap SWL (for hydrolysis, till 300°C-washable and reusable)	1 x 40 Pcs
	NEW UNIQUE		
172	LC20000	**Identification of illicit substances on unknown samples by LC/MS** (3,4-MDMA, 3,4- MDA 3,4- MDE, Acetylsalicylic acid, Aminophenazone, Amphetamine, Benzocaine, Buprenorphine, Caffeine, Cocaine, Diacetylmorphine, Diltiazem, Ephedrine, Hydroxyzine, Ibuprofen, Ketamine, Levamisole, Lidocaine, MBDB, Methamphetamine, Methadone, Methorphan, Monoacetylmorphine, Morphine, Naloxone, Nicotine, Noscapine, Paracetamol, Paroxetine, Phenacetin, Procainamide, Procaine, Pseudoephedrine, Sulphamethoxazole, THC, Trimethoprim, Tropacocaine)	**1 x 100 tests**
	SK20000	Starter kit for Illicit Substances on unknown confiscated samples	44 x 1 ml
	LC20011	Illicit Substances on unknown confiscated samples by LC/MS - Mobile Phase M1	4 x 500 ml
	LC20021	Illicit Substances on unknown confiscated samples by LC/MS - Mobile Phase M2	4 x 500 ml
	LC20016	Calibrator for Illicit Substances on unknown confiscated samples by LC/MS (3,4-MDMA, 3,4- MDA 3,4- MDE, Acetylsalicylic acid, Aminophenazone, Amphetamine, Benzocaine, Buprenorphine, Caffeine, Cocaine, Diacetylmorphine, Diltiazem, Ephedrine, Hydroxyzine, Ibuprofen, Ketamine, Levamisole, Lidocaine, MBDB, Methamphetamine, Methadone, Methorphan, Monoacetylmorphine, Morphine, Naloxone, Nicotine, Noscapine, Paracetamol, Paroxetine, Phenacetin, Procainamide, Procaine, Pseudoephedrine, Sulphamethoxazole, THC, Trimethoprim, Tropacocaine)	6 x 4 x 1,5 ml
	LC20019	Control for Illicit Substances on unknown confiscated samples by LC/MS - Levels1 and 2 (3,4-MDMA, 3,4- MDA 3,4- MDE, Acetylsalicylic acid, Aminophenazone, Amphetamine, Benzocaine, Buprenorphine, Caffeine, Cocaine, Diacetylmorphine, Diltiazem, Ephedrine, Hydroxyzine, Ibuprofen, Ketamine, Levamisole, Lidocaine, MBDB, Methamphetamine, Methadone, Methorphan, Monoacetylmorphine, Morphine, Naloxone, Nicotine, Noscapine, Paracetamol, Paroxetine, Phenacetin, Procainamide, Procaine, Pseudoephedrine, Sulphamethoxazole, THC, Trimethoprim, Tropacocaine)	2 x 4 x 1,5 ml
	LC20030	Deuterated Internal Standard Mix Solution on unknown samples (6-MAM-D6, Buprenorphine-D4, Cocaine-D3, Methadone-D9, Morphine-D6, THC-D3)	1 x 6 ml
	TF25402052130	Hypersil GOLD PFP Analytical column ~ 1000 injections (50 x 2,1 mm -1,9 µm)	1 Pc
	Z1636/26	10 ml Pyrex tubes with cap SWL (for hydrolysis, till 300°C-washable and reusable)	1 x 40 Pcs
	L-30-210	Eppendorf Tubes by 1,5 ml with caps	1 x 1000 Pcs
	S29057U	Standard glass Vial of 2 ml with screw cap for Autosampler	1 x 100 Pcs

pro training

ASSISTANCE

It is the **ONLY** Professional Path that provides Training and Assistance to laboratory staff During and After the Kit Adoption.

What is "PRO-TRAINING Assistance"?

Sold by our distributors to our customers Pro-Training is the ONLY Professional Support Package that provides Training and Assistance to laboratory staff During and After the Adoption of Eureka Kits.

Trained specialists will lead the customers through **3 phases**

PHASE I (theoretical-practical training)

FIRST DAY – THEORY

- Biochemical and pathophysiological summaries of molecules, description of the kit content and analytical performance.
- Explanation of sample preparation, injection into the chromatograph, calibration and reporting mode.
- Discussion of the critical issues encountered in routine work.

FOLLOWING DAYS – PRACTICE (approximately 2 daily methods)

A Practical Approach to Methods on ALL CHROMATOGRAPHIC Instruments in Clinical Laboratories or the Instruments we provide.
The preparation of real samples begins by injecting into the chromatograph and is concluded with the interpretation of the result.
The Specialist follows all the phases so that the operators can then work autonomously.
Reporting, discussion, verification and clarification.

Upon completing phase I, in addition to normal company contacts, Product Specialist will leave his telephone contact, giving technicians the opportunity to contact him in any unexpected circumstance.

PHASE II (follow-up/testing)

After completion of the phase I, the Specialist deepens and double-check the functioning of the application package installed. In particular:

- Checking any issues found in the usage of ready-to-use kits.
- Checking the functionality and set-up of the instrument.
- Checking any problems encountered in dosages.
- Helping with the interpretation of the chromatograms and possibly assisting with corrective actions.
- Further training in result's interpretation.
- Providing supporting literature.
- Meeting the customer analytical requirements.

For other problems that a clinical laboratory can meet during the course of its activity, we are able to reply within a few hours of the request.

PHASE III (after-sales support)

To ensure regular laboratory work, our Specialists are available throughout the period of professional collaboration.
The service is always active thanks to the telephone HELP line and online assistance.

The Specialist continues to be the reference point for any advanced support assistance:

- For a particular analyte, in case of values outside the reference range, the Specialist will provide support in the interpretation of the data from a clinical and/or toxicological point of view allowing the operator to report safely.
- In case of anomalies of the Chromatographic system (air inlet, overpressure, excessive dirt etc.), the Specialist is able to recommend trouble shooting actions to recover work quickly and safely.
- In case the customer is interested in acquiring new products, the Specialist is able to offer the best and most effective solution (e.g. adopting a massive kit, anticipating automation, etc.).
- In any other problematic situation in the lab…

eurekakit

Alphabetical Index

1-Hydroxypyrene in urine by Fluorimetry – FAST page 63
25-OH-Vitamin D3 and 25-OH-Vitamin D2 in plasma by LC/MS page 100
25-OH-Vitamin D3 and 25-OH-Vitamin D2 in plasma by UV - FAST - reduced volume page 35
3-Methylindole (Skatole) in urine by Fluorimetry - FAST page 41
3-Nitrotyrosine in plasma by UV – FAST page 34
Acetates in urine by GC/MS head space page 80
Acetone in urine by UV - FAST page 58
ADMA in serum and/or in plasma by Fluorimetry page 32
Amiodarone/Desethylamiodarone in serum and in plasma by UV - FAST page 49
Amphetamines in urine by detector MS page 82
Amphetamines in whole blood by GC/MS page 87
Antidepressants in serum and plasma by LC/MS page 108
Antiarrhythmics in plasma by UV - FAST page 49
Antiarrhythmics in plasma by LC/MS page 106
Antibiotics in plasma by LC/MS page 104
Antibiotics in plasma by UV - FAST page 53
Antiepileptics 1 in serum and in plasma by UV - FAST page 46
Antiepileptics 3 in serum and in plasma by UV - FAST page 47
Antiepileptics 4 in serum and in plasma by UV - FAST page 48
Antiepileptics 5 in serum and in plasma by UV - FAST page 48
Antiepileptics 6 in serum and in plasma by UV - FAST page 48
Antiepileptics in plasma by LC/MS page 107
Antiepileptics in serum and in plasma by LC/MS page 108
Antimycotics in plasma by Fluorimetry - FAST page 53
Antimycotics in plasma by LC/MS page 105
Antipsychotics in plasma by LC/MS page 109
Antituberculosis Drugs in plasma by LC/MS page 105
Basic Drugs of Abuse in whole blood by GC/MS page 86
Benzodiazepines 1 in serum and in plasma by UV-FAST page 50
Benzodiazepines 2 in serum and in plasma by UV-FAST page 50
Benzodiazepines in serum by LC/MS page 109
Benzodiazepines and Barbiturates in urine by LC-MS/MS page 116
Benzoylecgonine-Cocaethylene-Cocaine in urine by detector MS page 83
Beta-Carotene in plasma by UV/VIS - FAST page 34
Butyl Acetate in urine by detector FID and/or MS page 71
Butyl Alcohol in urine by detector FID page 71

Cannabinoids in whole blood by GC/MS page 87
Carbon Tetrachloride in urine by detector MS-head space page 77
Catecholamines/Metanephrines in plasma by LC/MS page 93
Catecholamines/Metanephrines in urine by LC/MS page 93
CDT test in serum by UV/VIS - FAST - Monoreagent page 66
Citrates in serum and in urine - Dual kit by UV page 31
Citrates in serum by UV page 31
Citrates in urine by UV - FAST page 31
Clozapine/Norclozapine in serum and in plasma by UV - FAST page 51
Coenzyme Q10 in plasma by UV - FAST page 33
Cortisol and Cortisone in saliva by LC/MS page 98
Cortisol and Cortisone in urine by LC/MS page 97
Degradation rate of 5-fluorouracil in PBMC by LC-MS/MS page 110
Delta 9-tetrahydrocannabinol-COOH (THC) in urine by detector MS page 84
Delta-9-THC in hair by GC/MS page 85
Delta-9-THC and Delta-9-THC-COOH in hair by LC/MS page 119
Diethylketone in urine by detector MS-head space page 73
Differentiated Fatty Acids in plasma by detector MS page 69
Differentiated Porphyrins in urine by Fluorimetry- FAST page 42
Drugs of Abuse in hair by GC/MS page 85
Drugs of Abuse in hair by LC/MS page 119
Drugs of Abuse in Saliva by LC/MS page 122
Drugs of Abuse in urine by LC/MS page 117-118
Drugs of Abuse in whole blood by GC/MS page 86
Drugs of Abuse in whole blood by LC/MS page 121
DUAL Kit Catecholamines by Fluorimetry - FAST page 27
Ethanol in whole blood by detector FID and/or MS-headspace page 89
Ethyl Acetate in urine by detector FID and/or MS page 71
Ethylglucuronide and Ethylsulfate in urine by LC/MS page 118
Ethylglucuronide in hair by LC/MS page 120
Fast Toxicological Screening kit in urine page 124
Fast Toxicological Screening kit in urine, plasma and whole blood page 123
Fast Toxicological Screening kit in plasma and whole blood page 123
Fast Toxicological Screening kit of 1st level for tabelled drugs of abuse in urine/hair/whole blood page 122
Formic Acid in urine by detector MS-head space page 78
Free 2,5 Hexanedione in urine by Fluorimetry - FAST page 57
Free Catecholamines in plasma by Fluorimetry - FAST page 26
Free Catecholamines in urine by Fluorimetry - FAST page 25

Free Catecholamines in urine with resin by Fluorimetry - FAST page 25
Free Eritrocitary Protoporphyrin IX and ZnPP in whole blood by Fluorimetry - FAST page 42-64
Free Metanephrine in plasma by LC/MS page 94
Free VMA/5-HIAA/HVA in urine by Fluorimetry - FAST page 28
Free VMA/5-HIAA/HVA in urine by LC/MS page 90
Glutatione in Whole Blood by Florimetry - FAST page 33
Hippuric Acid/o-m-p-Methylhippuric Acids in urine by UV-FAST page 59
Homocysteine in plasma by Fluorimetry - FAST page 32
Homocysteine in plasma by LC/MS page 100
Hydroxyproline in urine by Fluorimetry - FAST page 24
Hydroxyproline in urine by UV/VIS - FAST page 24
Identification of illicit substances on unknown samples by LC/MS page 125
Immunosuppressants DUAL KIT in whole blood/plasma by LC-MS - page 103
Immunosuppressants in whole blood by LC/MS page 102
Indican in urine by Fluorimetry - FAST page 42
Irinotecan/7-Ethyl-10-Hydroxycamptothecin (SN38) in plasma by LC/MS page 111
Isobutyl Acetate in urine by detector FID and/or MS page 71
Isobutyl Alcohol in urine by detector FID page 72
Isopropyl Alcohol in urine by detector FID page 72
Lamotrigine and 10,11-Dihydro-10-Hydroxycarbazepine in plasma by UV - FAST page 44
Lamotrigine in serum and in plasma by UV - FAST page 44
Levetiracetam in Plasma by UV - FAST page 45
Metformin in serum by UV/VIS - FAST page 53
Methadone and EDDP in urine by detector MS page 84
Methanol in urine by UV - FAST page 58
Methyl Acetate in urine by detector FID and/or MS page 71
Methylene Chloride (Dichloromethane) in urine by detector MS-head space page 77
Methyl-Ethyl-Ketone in urine (M.E.K.) by UV - FAST page 62
Methyl-Isobutylketone in urine by detector MS-head space page 72
Methyltrichloroacetate in urine by detector MS-head space page 74
Mycophenolic Acid in serum and in plasma by UV - FAST page 52
N-Methylacetamide and N-MethylFormamide in urine by CG/MS page 79
Norbuprenorphine and Buprenorphine in urine by detector MS page 82
o-Cresol and Phenol in urine by Fluorimetry - FAST page 64
Oleolites (Phytocannabinoids for therapeutic use) by GC/MS page 88
Oleolites (Phytocannabinoids for therapeutic use) by LC/MS page 125
Opiates in urine by detector MS page 83
Oxalate in urine by UV and/or by Fluorimetry - FAST page 30
Perampanel in plasma by Fluorimetry - FAST page 45

Phenylglyoxilic Acid/Mandelic Acid in urine by UV - FAST page 59
Phenylglyoxilic/Mandelic/Hippuric/o-m-p-Methylhippuric Acids in urine by UV - FAST page 60
Ponatinib in plasma by LC/MS page 111
Propyl Alcohol in urine by detector FID page 72
Pyridinium Cross-Links in urine by Fluorimetry - FAST page 24
Serotonin in serum by Fluorimetry - FAST page 30
Serotonin in urine by Fluorimetry - FAST page 29
Sotalol in plasma by Fluorimetry - FAST page 49
S-phenylmercapturic Acid in urine by Fluorimetry-FAST page 62
Steroid Hormones in serum and Plasma by LC/MS page 96
Steroid Hormones in urine by LC/MS page 95
Steroid Hormones in serum and Plasma by LC/MS Extractive Method page 97
Tamoxifen, Endoxifen in plasma by LC/MS page 110
Tetrachloroethylene in urine by detector MS-head space page 74
Topiramate in plasma by Fluorimetry page 46
Total 2,5 Hexanedione in urine by UV - FAST page 56
Total Metanephrines in urine by Fluorimetry - FAST page 29
t,t Muconic Acid and S-Phenylmercapturic Acid in urine by LC/MS page 114
t,t- Muconic Acid in urine by UV - FAST page 61
trans-1,2-Cyclohexanediol in urine by detector FID and/or MS page 73
Trichloracetic Acid in urine by detector ECD and/or MS-head space page 76
Trichloroethane in urine by detector MS-head space page 74
Trichloroethanol in urine by detector MS page 75
Trichloroethylene in urine by detector MS-head space page 75
Tricyclic Antidepressants (TAD) in serum and in plasma by UV page 52
Trimethylamine n-oxide (tmao) in plasma by LC-MS/MS page 99
Valproic Acid in plasma by UV-FAST page 46
Vitamin B1 in whole blood by Fluorimetry - FAST page 36
Vitamin B1/B6 in whole blood by Fluorimetry - FAST page 39
Vitamin B2 in whole blood by Fluorimetry - FAST page 37
Vitamin B6 in whole blood by Fluorimetry - FAST page 38
Vitamin C in plasma by UV - FAST page 40
Vitamins A/E in plasma by UV - FAST page 35
VOC (volatile organic compounds) in urine by GC/MS page 78
VOC (volatile organic compounds) in whole blood by GC/MS page 79

General Sales Conditions

EXTRACT OF GENERAL SALES CONDITIONS

- Delivery terms: ex works.

- We will apply the valid prices on receipt of the goods unless otherwise specified.

- The goods are always transported at complete risk of the purchaser.

- The seller offers no guarantee concerning the use of the goods and, therefore, no responsability could be attributed to the seller and no compensation could be required.

- The seller therefore neither accepts responsability nor offers compensation.

- Eureka reserves the right to change item characteristics without notice provided that the intended use remains the same.

- Any non compliance has to be sent to the seller within 5 working days from the reception of the good.

RETURNS FOR NO CONFORMING PRODUCT

- Products returns are only accepted with prior authorization.

- The Customer must submit a written claim to our sales department.

- After authorization the Customer should include with the Returned product and shipping paper a note that explains the reason for the return, the name of the product, its code and the number of the shipping document or invoice.

- Any material returned without the appropriate RMA (Return Material Authorization) will be given back to the sender with charges to be paid by the customer.

RETURNS FOR NO CONFORMING SHIPMENT

- We suggest our customers check the integrity of the packaging on receipt of the goods.

- If part of the received package or the whole package should be damaged, we suggest our customer to report immediately on the delivery note.

eureka kit
The Widest Range in the World of diagnostic Kits
for Analytical Chromatographic Systems
(HPLC, GC, GC-MS, LC-MS/MS)
Serial No. 611021141 ID 4.6mm

eureka kit

Produced by

eureka Lab Division

website

EUREKA LAB DIVISION S.r.l.
via Enrico Fermi, 25
60033 Chiaravalle (Ancona) – Italy
tel +39 071 74.50.790
fax +39 071 74.96.579

www.eurekakit.com

video