

€ 22.–

Your guide to laboratory and pathology equipment in Europe

LAB BOOK

2023 / 2024

Vol. 10

- Automation & Sample Processing
- Chemistry & Immunochemistry
- Hematology
- Pathology
- DNA
- Microbiology
- POCT
- Information Technology
- Other Applications



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Dear reader,

the world went through unforeseeable and challenging times. We all had to adapt and find new ways to continue our work. The lab industry, maybe more than many others, was forced by Covid-19 to change the way they make their products so they can be used in entirely new settings. The result is an era that is defined by two ideas: resilience and agility.

The pandemic has demonstrated how important it is to manage unforeseen events and adapt quickly. The manufacturers of lab products have shown to be resilient by focusing on the needs of their customers and by developing innovative solutions. But this will not suffice to master future challenges. Resilience has to become an integral part of companies' DNA in order for them to be able to survive and to grow. This was the take-home message of many congresses this year such as Euromedlab in Rome, Italy.

Agility is another key term today. The speed of change has become mindboggling the past few years. This requires adaptability and the willingness to adopt new processes and technologies swiftly. Therefore, in the new edition of our LABBook we not only present innovative products but also exciting feature articles that highlight the most recent trends and developments in the laboratory industry.

The LABBook 2023 showcases a broad range of products that can help you reach your business goals and make your lab processes more efficient. From high-end equipment through every-day supplies to innovative technologies you will find the tools you need to strengthen resilience and agility in your company.

Get inspired by the many promising lab ideas – and stay healthy!

Best regards

A handwritten signature in black ink that reads "S. Buske". The signature is written in a cursive, slightly stylized font.

Sonja Buske
Specialist editor healthcare

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Automation & Sample Processing

Sample Processing
Automation
Sample Logistics



Sample Processing

Sample Processing

Beckman Coulter – AutoMate 2500 Family Sample Processing Systems

Highlights:

When you need to improve lab efficiency, turn to the AutoMate 2500 Family for an automation system that fits your lab's unique requirements.

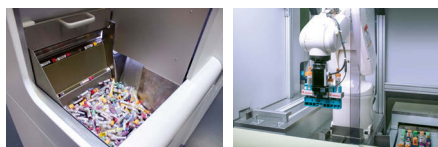
The AutoMate family of sample processing systems allows you to streamline pre- and post-analytical processes to help gain optimal performance and use of resources, eliminating steps between sample receipt and analysis

- Single point of entry to manage all tubes, from sample receipt to archiving
- Advanced, automated sample loading and sorting, to minimize manual handling
- Cap color analysis validates sample type against test ordered for error prevention
- Through-the-label sample volume detection
- Sorting speeds of 800–1,200 tubes per hour
- Intelligent aliquoting and tube labeling to eliminate manual sample preparation errors and ensure faster, more accurate secondary-tube preparation
- Intuitive software to facilitate ease of use
- Re-sealer for safe and convenient transfer to archiving



Sample Processing

SARSTEDT – BL 1200 – Sort Connect



Highlights:

- Sort Connect – Bulk feeding of samples with universal connection to laboratory track systems
- Process optimization with pre sorting and separation of tubes not destined for testing on the track
- Modular design enables a range of configurations
- Sample accessioning
- Intelligent sample re-routing where test order is missing
- Freely configured sorting platforms
- Automatic distribution to all common makes of analyser racks or into bins
- Can handle a large number of different tube types

Sample Processing

SARSTEDT – Bulk Sorter BL 1200



Highlights:

- Ideal in combination with any analytical platform
- Sample throughput up to 1,200 tubes/h
- Process any tube type of 80 to 110 mm length (with cap) and 11 to 16 mm diameter, including false bottom options
- Suited for any sample type (serum / plasma, serum gel / plasma gel, EDTA, citrate, blood sugar, urine)
- Intelligent re-routing when waiting for lab order
- Automatic sample accessioning
- Customised sort rules to a variety of carrier types or bins

System range:

- BL 1200 – Bulk to Rack
- HCTS2000 MK2 – Bulk to Box
- Sort Connect – Bulk to Track

Sample Processing

SARSTEDT – Decapper DC 1200 / Recapper RC 1200



Highlights:

Decapper DC 1200:

- Automatic decapping of all tube diameters from 11 to 16 mm
- Processes a variety of tube types in mixed operation
- Sample pre-sorting for the decapping process is unnecessary

Recapper RC 1200:

- Automatic recapping of all tube diameters from 13 to 16 mm
- Minimises the risk of exposure
- Eliminates sample contamination
- Archiving cap fits most tubes from 13 to 16 mm diameter
- Automated decapping enabled

Sample Processing

SARSTEDT – High Speed Sorter



Highlights:

Pre- and post-analytics in a modular design:

- Bulk and rack feeding of samples
- Connection to sample transport systems (e.g. Tempus600®)
- Sample accessioning
- Intelligent sample re-routing where test order is missing
- Centrifugation status determination for gel-tubes
- Can handle a large number of different tube types
- Sample throughput up to 1200 tubes/h
- Compatible with most racks or carrier types
- Opens tubes with push caps, stoppers and screw caps
- Can be customized to sort by tube type, material (barcode) or test request
- Closes tubes with universal archiving caps
- Recapping with screw caps for SARSTEDT tubes with 13 or 15 mm diameter

Sample Processing

SARSTEDT – Sample Distribution System PVS 1625



Highlights:

The PVS 1625 is a tailor made automation system for pre- and post-analytical processing of samples. It is capable to handle most kind of rack and tray types. As an open system, it is complementary to any analytical platform or can be used independently.

Full function pre- and post-analytical system

- Modular configuration according to laboratory needs with: Loading platform / ID Module / Decapper / Recapper / Aliquoter / Sorter
- For all common tube types: 13 – 16 mm diameter, 65 – 100 mm length (without cap)
- Aliquoter for secondary tubes or multi-wells available

Sample Processing

Sample Processing

SARSTEDT – Sorter DC/RC 900 Flex



Highlights:

Pre- and post-analytics in one system:

- Processes any tube diameter from 11 to 16 mm
- Sample throughput up to 900 tubes/h
- Compatible with most racks or carrier types
- Online or offline operation
- Opens tubes with push caps, stoppers and screw caps
- Can be customised to sort by tube type, material (barcode) or test request
- Closes tubes with universal archiving caps
- Retrofitting of decapping or recapping module is possible
- Recapping with screw caps for SARSTEDT tubes with 13 or 15 mm diameter

Sample Processing

T&O LabSystems – ATRAS Bulk Loader and Bulk/Rack Sorter – 4th generation



Highlights:

Cut down your process time, simplify your daily life and configure the ATRAS to fit your needs.

- Cost-efficient registration and sorting of bulk material
- Numerous output configurations for sorting into bulk bins, customer-specific racks and centrifuge buckets
- Fast bulk-to-rack sorting on a small footprint (3000 samples / h on 1.2 m²)
- Extendable by our intelligent sample transportation system InTrac

Equip the ATRAS according to your requirements

Features such as CapIdent, STAT Input, SIQ bin, Piston detection, Spin Check and Barcode alignment



Automation

Beckman Coulter – DxA 5000 Total Lab Automation System

Sample throughput: up to 1,200 tubes/h



Highlights:

The DxA 5000 helps laboratories meet the challenges of today's highly focused healthcare environment through a collection of patented innovations that deliver rapid and consistent turnaround time, provide a new level of comprehensive pre-analytical sample quality detection, and reduce the number of manual processing steps to significantly improve laboratory efficiency. Leveraging first-of-its-kind dynamic system software, the DxA 5000 utilizes Intelligent Routing to bring automated patient-

centric workflow to the laboratory. By understanding the tests requested, sample volume available and real-time analyzer capacity and status, the DxA 5000 continuously calculates the most expeditious route for every patient sample – both STAT and routine.

The DxA 5000 enhances Beckman Coulter's comprehensive portfolio of scalable solutions and is a key component of its vision to bring workflow automation to laboratories of all sizes.

Automation

Beckman Coulter – The DxA 5000 Fit Workflow Automation System

Sample throughput: up to 375 tubes/h

Highlights: At a time when up to 75 percent of lab errors take place pre-analytically, laboratories can benefit from comprehensive workflow automation. For this reason, Beckman Coulter developed the DxA 5000 Fit, an automation system that offers an improved approach to laboratory workflow by making intelligent automation accessible to labs of virtually any size. The DxA 5000 Fit leverages DxA 5000 technology, providing the benefit of intelligent automation to midsize labs in a compact footprint.

The DxA 5000 Fit drives speed and accuracy, all while maintaining a small footprint. It eliminates up to 80% of the manual steps associated with processing a patient sample, allowing you to keep your focus on what matters most: patient care.



Tissue-Tek Genie®

Advanced Staining System

- Optimal ready-to-use antibodies, probes and reagents

- Predictable turnaround time

- Closed system for easier IVDR compliance

- Pay-per-slide and transparent cost management

- GenieOnline: auto-replenishment for worry-free stock management



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Sample Logistics

SARSTEDT – Tempus600® Connection Module



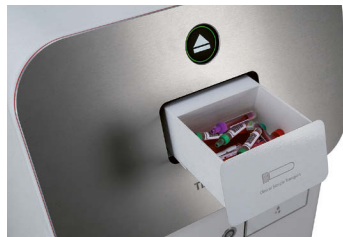
Highlights:

The Tempus600® Connection Module is part of an automated one-touch handling system for sample tubes. The sample tubes are delivered from the ward to the laboratory through the dedicated point-to-point system. The sample tubes are gently slowed down before landing in the automation module. From here they are automatically transferred e.g. onto a track system.

- Compatible with all lab automation systems including sorters and bulk loaders
- A brake module can be fitted to increase sample throughput and failure-free tube loading.
- Up to 8 connections

Sample Logistics

SARSTEDT – Tempus600® Quantit



Highlights:

The Tempus600® Quantit provides direct and fast transport of blood samples to the laboratory without batching or manual packaging steps. The samples are placed in a drawer, transported via a pipeline \varnothing 25 mm and landed in the laboratory within seconds. Drastically reducing the total turnaround time for blood sample testing results in faster diagnosis and patient treatment.

- Sending both high volume and urgent samples
- Samples are always oriented the right way by the system
- Compatible with all test tubes: length 80 – 110 mm, diameter 12 – 18 mm
- Connectable to all lab automation, sorters and bulk loaders

Sample Logistics

SARSTEDT – Tempus600® Vita



Highlights:

The Tempus600® Vita provides dedicated, direct and fast transport of blood samples to the laboratory without batching or manual packaging steps. The samples are placed in the insertion point of the Vita, transported via a pipeline \varnothing 25 mm and landed in the laboratory within seconds. Drastically reducing the total turnaround time for blood sample testing results in faster diagnosis and patient treatment.

- Handles up to 810 sample tubes/hour
- Compatible with all sample tubes: length 80 – 110 mm, diameter 12 – 18 mm
- Connectable to all lab automation, sorters and bulk loaders

Chemistry & Immunochemistry

Clinical Chemistry
Immunoassays
Immunochemistry
Integrated Systems
Urine Screening
Rapid Testing
CSF and Alzheimer's
Disease Diagnostics

mindray

 **BECKMAN
COULTER**

 **ELITechGroup**
EMPOWERING IVD

 **SARSTEDT**

RANDOX

Blood test detects risk of neurotoxicity from CAR T-cell therapy

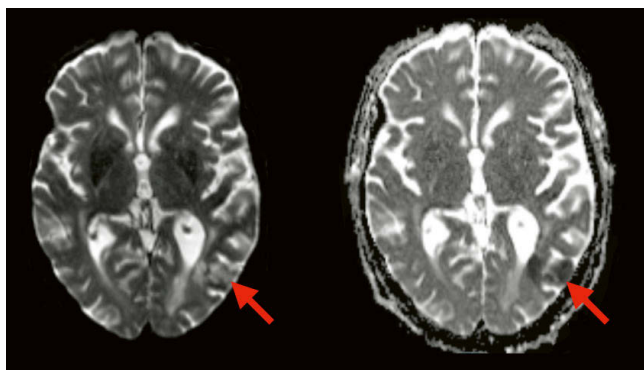
Chimeric antigen receptor (CAR) T-cell therapy is an immunotherapy treatment that re-engineers a patient's own T-cells to help them attack malignant tumour cells. It has been very effective in the treatment of blood cancers, including certain types of leukaemia and lymphoma. However, two serious side effects are common as a result of the treatment: cytokine release syndrome (CRS) and immune effector cell-associated neurotoxicity syndrome (ICANS).

Report: Cynthia E. Keen

Researchers in Germany and in the United States have separately determined that high levels of serum neurofilament light chain (NfL), a protein in the blood indicative of neuroaxonal injury, are associated with ICANS complications. A simple blood test identifying NfL levels can help identify cancer patients who are at risk of developing ICANS following CAR T-cell therapy.

ICANS represents a broad spectrum of neurologic symptoms ranging from mild confusion, tremor, headaches, difficulty reading, difficulty concentrating, lethargy, and memory problems to severe brain swelling, seizures, coma, and even death. Between 40% to 60% of patients receiving CAR T-cell therapy develop ICANS.

Two independent studies, one conducted at the Washington University at St. Louis (WUSTL) and the other by a multi-institutional German team led by researchers at Ludwig Maximilian University (LMU) of Munich, have identified that higher NfL levels in cancer patients' pre-CAR T-cell treatment correlate with the severity of subsequent ICANS.



Evidence of a stroke (red arrows) is seen on this MRI scan of a brain of a patient who developed neurotoxic side effects after CAR T-cell therapy.

© Dr Omar H. Butt of Washington University at St. Louis

German multi-institutional study

Principal investigator Prof Louisa von Baumgarten, MD, of LMU's University Hospital, and co-researchers hypothesized that neuroaxonal integrity might have an important role in determining the severity of ICANS. Their hypothesis was based on numerous studies demonstrating that NfL serum levels correlate well with cerebrospinal fluid levels, mirror the extent of neuroaxonal injury, and predict outcomes for severe neurologic conditions, including multiple sclerosis, neurodegenerative disorders, traumatic brain injury, and ischemic stroke.

Ninety-six patients being treated at CAR T-cell therapy centres at LMU and University Hospital Heidelberg had their serum NfL levels measured five days before treatment, the day of treatment, and on the day that maximum ICANS symptoms were exhibited. NfL pre-levels were significantly higher in patients who developed moderate to severe ICANS after CAR T-cell transfusion than in patients reporting no or mild ICANS. Both post-treatment and pre-treatment NfL levels correlated with the severity of the subsequent neurotoxicity.

Writing in *Blood Advances*, the researchers said, 'These findings suggest that measuring the level of NfL – alone or in combination with known risk factors such as tumour burden, car T-cell expansion, systemic inflammation, and immune system activation – might be useful to predict severe neurotoxicity after CAR T-cell transfusion [...]. Our data imply an increased risk for more severe ICANS as a result of neuroaxonal injury if NfL – pre-treatment is greater than 75 pg/ml'.

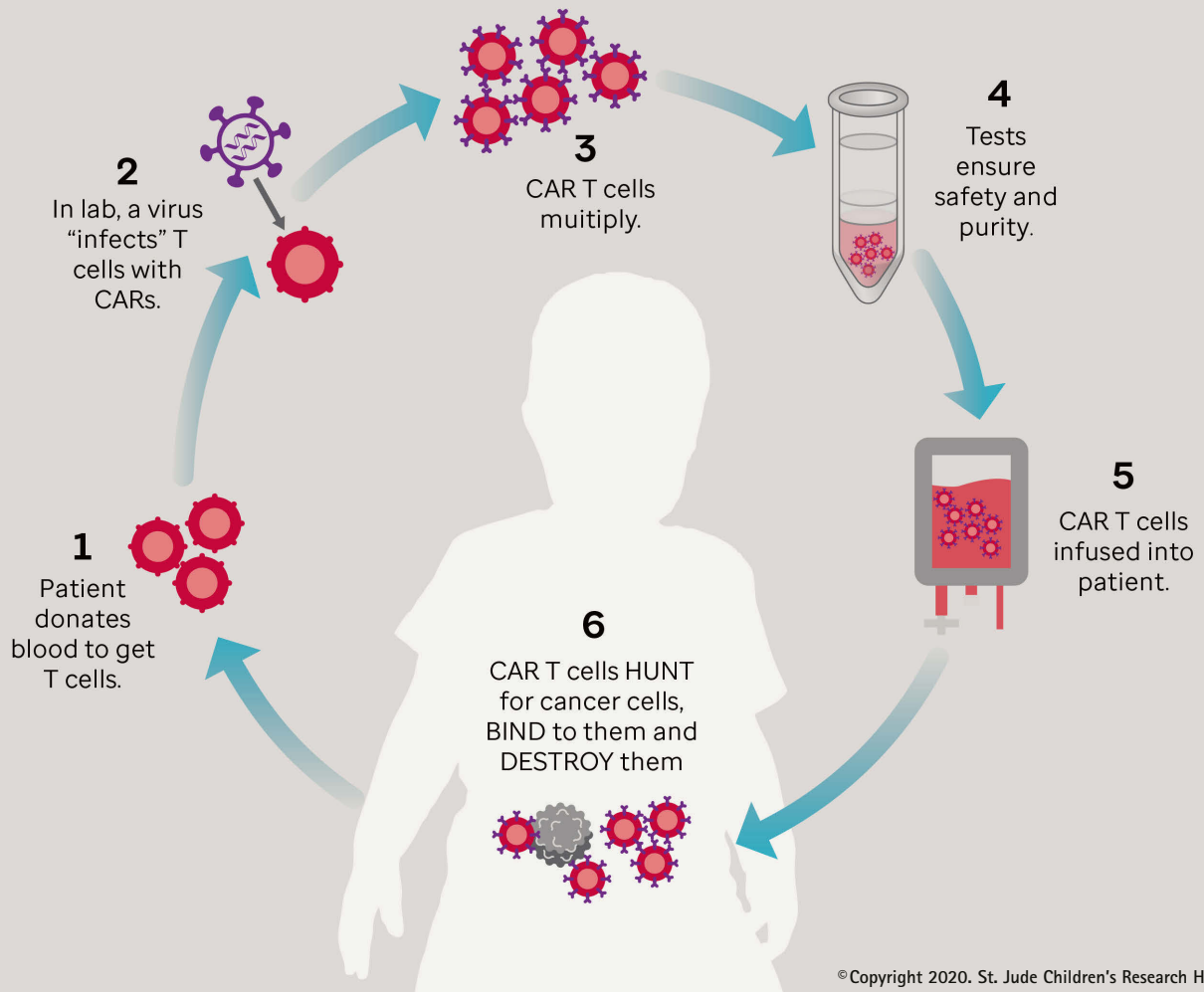
They are currently validating the predictive value of NfL levels in a prospective setting, and correlating findings with EEG, fMRI, and comprehensive neuropsychologic testing.

USA study

Armin Ghobadi, MD, and Beau M. Ances, MD, PhD, both of WUSTL, led a similar study, published in *JAMA Oncology*. They measured plasma NfL levels of 30 patients receiving CAR T

Harnessing the Power of the Immune System to Fight Cancer

Chimeric antigen receptor (CAR) T-cell therapy uses the child's own immune cells to seek out and kill tumor cells.



therapy at WUSTL and Case Western Reserve University in Cleveland at seven time-points, starting at baseline pre-CAR T infusion to 30 days after. They analysed NfL levels in patients who developed each severity grade of ICANS and those who did not, as well as age, sex, tumour burden, history of neurologic disease, and history of neurotoxic therapies.

'Patients who developed any grade ICANS had significant elevations in baseline NfL level'; they write. 'Baseline NfL level correlated with ICANS grade. No association was observed with demographic, oncologic, neurologic, or exposure to neurotoxic risk factors, such as CRS. The risk of developing ICANS is associated with pre-existing neuroaxonal injury that was quantifiable with plasma NfL level in a subset of patients.'

WUSTL lead author Omar H. Butt, MD, PhD, tells European Hospital that the team is scaling up to wide scale testing in the near future. 'We are also trying to determine where in the brain this injury originates, how this injury interacts with the immune system to develop symptoms, and how long the injury lasts after symptoms along with its lingering consequences. All these questions are under active investigation with an ongoing prospective trial integrating advanced neuroimaging with blood and spinal fluid biomarkers and neuro-physiological testing in patients undergoing cellular therapy.'

Clinical Chemistry

Beckman Coulter – Antipsychotic Drug Monitoring



Assays: Clozapine, Risperidone, Aripiprazole, Olanzapine, Quetiapine, Paliperidone

Highlights: Antipsychotic drug monitoring provides healthcare professionals accurate and vital information. Testing of antipsychotic drugs can help manage patient therapy by providing greater clarity on the causes of treatment failure (i.e., adherence, drug resistance, drug-drug interactions and drug metabolism) and may help to establish the right medication at the right dose more quickly.

Liquid, ready-to-use reagents for immediate and easy use to provide faster, actionable insights across the care continuum for patients with serious mental illness. Psychiatry antipsychotic assays integrate seamlessly into established workflows with no special training required and can be performed on any of Beckman Coulter's Clinical Chemistry AU and DxC/AU systems.

Clinical Chemistry

Beckman Coulter – AU5800 Series Clinical Chemistry Analyzers



Dimensions: 1260 × 2600 × 1580 mm (h × w × d)

Weight: 1,070 kg

Sample throughput: 2,000 – 9,800/h

Power consumption: 200 – 240 W

Highlights: The AU5800 series represents the highest throughput and fastest turnaround time in the Beckman Coulter AU Chemistry Analyzer Family. With true random-access capabilities, the AU5800 series is available in four different scalable models, which are designed to meet the needs of the high-volume core hospital laboratories, as well as the ultra-high-volume commercial laboratory market segment.

- Maximize throughput with an intelligent sample management system that optimizes the processing of racks based on the tests ordered
- Ensure quick turnaround time for critical patients with STAT priority testing and auto-repeat of abnormal results

Clinical Chemistry

Beckman Coulter – DxC 700 AU Chemistry Analyzer



Dimensions: 1300 × 1250 × 890 mm (h × w × d)

Weight: 460 kg

Sample throughput: 800 – 1,200/h

Power consumption: 200 – 240 W

Highlights: Designed to meet the needs of mid- to high-volume clinical laboratories, the DxC 700 AU Chemistry Analyzer reduces the number of test-processing steps by 30% due to its intuitive user-interface that allow operators to spend less time on daily tasks and more time producing the quality results that empower better decision-making.

- Simple, intuitive design of the DxC analyzer with the robust throughput capabilities of the AU analyzer
- Configurable with a total laboratory solution option to connect the Analyzer with pre-analytical automation, immunoassay and clinical IT

Clinical Chemistry

ELITechGroup – Selectra Mach5



Dimensions: 1050 × 650 × 700 mm (w × h × d)

Weight: 110 kg

Sample throughput: 250–500 tests/hour (workflow dependent)

Assays: Selectra Reagents Line; Anaemia, Cardiac, Diabetes, General Chemistry, Specific Proteins, Special Chemistry

- Highlights:**
- Economical fully automated benchtop solution
 - Efficiency through consolidation of routine and special testing
 - Up to 65 barcode readable reagent positions
 - Accessible sample area with 85 primary tube positions; 65 barcode readable
 - Sustainability through optimized water consumption, LED-based photometric cartridges and reusable cuvette rotor
 - Broad reagent menu and state-of-the-art analytical quality with Selectra Reagents

Clinical Chemistry

ELITechGroup – Selectra ProS



- Dimensions:** 900 × 750 × 600 mm (w × h × d)
Weight: 75 kg
Sample throughput: Up to 133 tests/hour; Up to 333 ISE tests/hour (optional ISE)
Assays: Selectra Reagents Line; Anaemia, Cardiac, Diabetes, General Chemistry, Specific Proteins, Special Chemistry
Highlights:
- Compact automated system with a small footprint for efficiency
 - Reagent and sample handling combined within one module
 - 30 cooled reagent positions for extended onboard stability
 - 25 barcode readable sample positions
 - Effective use of consumables for cost-efficiency
 - The ideal benchtop workhorse for primary, STAT, or backup testing needs
 - Board menu and state-of-the-art analytical quality with Selectra Reagents

Clinical Chemistry

ELITechGroup – Selectra ProM



- Dimensions:** 1220 × 750 × 610 mm (w × h × d)
Weight: 95 kg
Sample throughput: Typically 180 tests/hour; Up to 333 ISE tests/hour (optional ISE)
Assays: Selectra Reagents Line; Anaemia, Cardiac, Diabetes, General Chemistry, Specific Proteins, Special Chemistry
Highlights:
- A fully automated integrated chemistry solution
 - Effective use of consumables to reduce operational cost
 - Reusable economical cuvette rotor with washer and optical systems
 - 62 sample positions; 50 barcode readable for positive sample identification
 - 32 cooled reagent positions for extended onboard stability
 - A smart choice when growing into a midsized laboratory
 - Board menu and state-of-the-art analytical quality with Selectra Reagents

Clinical Chemistry

ELITechGroup – Selectra System Reagents



- Assays:** Anaemia, Cardiac, Diabetes, General Chemistry, Specific Proteins & Special Chemistry, Ion Selective Electrodes, Consumables, Calibrators and Controls
Highlights:
- Ready-to-use, liquid stable, barcoded reagents to minimize errors
 - European design and manufactured; CE-IVD validated
 - Referenced and traceable to industry standards
 - Reproducible performance across the Selectra analyzers
 - Forms the foundation of consistent, accurate, and reliable results
 - Assay menu continues to broaden through ongoing development

Clinical Chemistry

Mindray – BS-240Pro Clinical Chemistry Analyzer



- Dimensions:** 860 × 550 × 660 mm (w × h × d)
Weight: 115 kg
Sample throughput: Constant 240 tests/h, up to 400 tests/h with ISE
Highlights:
- Constant throughput with 240 photometric tests/h, up to 400 tests/h with ISE module
 - Large and flexible capacity: up to 100 sample/reagent positions (50 fixed + 50 interchangeable)
 - Reduced reagent consumption: 100 µl minimum reaction volume
 - Intelligent probe with liquid level detection, V&H collision detection, inventory monitoring, reagent pre-heating and optional clog detection
 - Grating photometer with 12 wavelengths, dual-diaphragm and dual-lens
 - HbA1c smart-sampling function, automatic hemolysis

Clinical Chemistry

Mindray – BS-430 Clinical Chemistry Analyzer



Dimensions: 1050 × 1150 × 720 mm (w × h × d)
Sample throughput: Constant 420 tests/h, up to 625 tests/h with ISE

- Highlights:**
- Large loading capacity: 92 reagent positions, 102 sample positions
 - Whole blood HbA1c: supports HbA1c onboard hemolysis
 - Advanced software platform: auto QC, auto reflex, substrate depletion & enzyme linearity extension, etc.
 - Quick start-up time: 5 minutes system initialization, 1 minute system wake-up
 - Low reagent consumption: minimal 100µl reaction volume

Clinical Chemistry

Mindray – BS-600M Chemistry Analyzer



Dimension: 1380 × 1200 × 860 mm (w × d × h)
Throughput: 600 photometric tests per hour, up to 800 tests per hour with ISE
Number of Parallel Tests: up to 77 photometric tests + 3 ISEs + 3 serum indices

- Highlights:** BS-600M is a powerful yet efficient chemistry analyzer. It can deliver a maximized throughput in a minimal footprint of 1.2 m², helping laboratories perform more tests in a smaller space and with a shorter TAT. It also features continuous sample loading, whole-blood HbA1c function, STAT Priority, integrated ISE module. With excellent sigma metric performance, BS-600M helps deliver reliable chemistry test results.

Clinical Chemistry

Mindray – BS-800M Clinical Chemistry Analyzer



Dimensions: 1600 × 1200 × 1015 mm (w × h × d)
Weight: ≤ 450 kg for analytical unit, 150 kg for SDM
Sample throughput: Constant 800 tests/h, up to 1,200 tests/h with ISE
No of parallel samples: up to 68 on-board chemistry tests

- Highlights:**
- Modular system: flexible connection
 - Whole Blood HbA1c, automatic hemolysis
 - Accurate: high pipetting precision, coolant circulation reagent refrigeration, direct solid-heating system, effective mixing unit and intelligent clot detection
 - Innovative: reagent bubble detection, dot light source and water quality Monitoring
 - Cost-efficient: large capacity with SDM racking system, 100 µl minimum reaction volume, one key STAT, Onboard reagent loading and unloading
 - Original calibrators with traceability

Clinical Chemistry

Randox – Acusera Quality Control



- Highlights:** Randox specialises in Quality Control, crafting high-quality materials that streamline procedures and save labs time and resources, no matter their size or budget. Our diverse products include third-party quality controls & calibrators, interlaboratory data management, external quality assessment, calibration verification, and molecular IQC/EQA for infectious disease testing. Trusted by 60,000 users worldwide, Randox consistently delivers reliable results.

Clinical Chemistry

Randox – Reagents



Highlights: Randox offers a global range of third-party diagnostic reagents, renowned for exceptional quality and precise results. Our range includes 100+ assays with over 100 disease markers, spanning proteins, lipids, drugs, antioxidants, diabetes indicators, and veterinary tests. Various formats and methods cater to labs of all sizes. We provide specialised Randox Easy Read and Easy Fit reagent packs, compatible with diverse chemistry analysers, ensuring freedom of choice without compromising quality.

Clinical Chemistry

Randox – RIQAS EQA



Highlights: RIQAS is the world's largest EQA scheme, spanning 135 countries with 65,000 labs. It offers comprehensive External Quality Assessment, ensuring compliance and accurate test systems. With 36 programs, user-friendly reports, and frequent reporting, RIQAS detects errors promptly. High-quality samples aid accuracy. Accredited internationally, RIQAS assures reputable EQA engagement.

mindray

All in 1 Automated Hematology Solution

1 single EDTA tube for all who blood analysis: CBC+CRP+ESR+SAA

Highest Efficiency with Easy Operation

HbA1c

Slide reading

Smear preparation

ESR+SAA

Accurate & Reliable analysis by 3D SF-Cube with auto reanalysis

Sorting & Storage

H-50
HPLC for
HbA1c

MC-80
Digital
Morphology
Analyzer

SC-120
Slide Maker
& Stainer

BP 200n
ESR+CRP+SAA
Analyzer

BC-6800Plus
Auto Hematology
Analyzer+ ESR

TM-1000
Tube Sorter



CR-30 [H]
Conc. Reagent Delivery System

Clinical Chemistry

SARSTEDT – Microvette® – Capillary Blood Collection



- Highlights:**
- Flexible capillary blood collection systems such as the Microvette® – tailor-made to the individual needs of each patient group.
 - Different patient groups and collection techniques require different collection systems.
 - With a nominal volume range from 100 – 500 µl, the capillary blood collection systems product range is one of the most extensive in the entire market.
 - Depending on the requirements, our portfolio includes Microvettes with conical or round bottom inner tubes and the option for various different collection techniques, end-to-end or with a collection rim.

Clinical Chemistry

SARSTEDT – S-Monovette® cfDNA Exact



- Highlights:**
- Reliable sample stabilisation: up to 14 days at 4 °C to 37 °C
 - No gDNA input from nucleated cells – unaltered and exact analysis results
 - Lowest haemolysis – best possible sample quality – reliable results
 - The S-Monovette® cfDNA Exact standardises the pre-analysis of liquid biopsy samples and guarantees excellent sample quality.

Clinical Chemistry

SARSTEDT – S-Monovette® GlucoExact



- Highlights:**
- The S-Monovette® GlucoExact stands for precise determination of glucose and stabilizes the glucose concentration immediately for up to 96 hours at room temperature.
 - It meets the Gestational Diabetes Guidelines of the German Diabetes Association (DDG) and the German National Disease Management Guidelines (NVL) for type 2 diabetes.
 - Gold standard for glucose determination.

Clinical Chemistry

SARSTEDT – S-Monovette® LightPROTECT



- Highlights:**
- Light Protection – from blood collection to archiving
 - Sustainable by avoiding aluminium foil
 - Process-compliant pre-analytics
- Light protection is provided by the special white coating on the S-Monovette® tubes and is guaranteed from the time of blood collection to opening the specimen in the laboratory. This S-Monovette® can be labelled and processed as normal. Direct legibility and therefore the usual convenient specimen identification are maintained. The S-Monovette® Serum Gel LightPROTECT eliminates the inconvenience of wrapping the blood sample, e.g. in aluminium foil/aluminium foil + tape. This also enables an effortless contribution to greater sustainability in the workplace by saving resources (aluminium foil).

Clinical Chemistry

SARSTEDT – S-Monovette® Lithium Heparin Gel+



- Highlights:**
- Laboratory results influence therapy decisions by 70 to 85 percent. For both the doctor and the patient, it is important that laboratory results are incorporated into therapy decisions quickly and without compromise.
 - The S-Monovette® Lithium Heparin Gel+ guarantees reliable sample quality at a reduced TAT: The centrifugation time is reduced by up to 50 percent which enables faster therapy decisions. Also the equipment utilization is optimized at an improved workflow.

Clinical Chemistry

SARSTEDT – S-Monovette® RNA Exact



- Highlights:**
- Reliable sample stabilisation: at room temperature up to five days – refrigerated (8 °C) 14 days – frozen: stable for years
 - Most reliable analysis results due to limit-free stabilisation of different transcripts and highest RNA yields
 - Significantly faster RNA isolation compared to established systems – effective time management – results available faster
 - The use of the S-Monovette® RNA Exact ensures standardisation of sampling for subsequent gene expression analyses.

Clinical Chemistry

SARSTEDT – S-Monovette® – Venous Blood Collection



- Highlights:**
- S-Monovette® – the Revolution in blood collection. A blood collection system that combines two blood collection techniques – the aspiration technique and the vacuum technique.
 - The S-Monovette® is suitable for all vein conditions and achieves an optimal sample quality, thereby producing the best results.
 - The aspiration technique is a gentle technique for routine blood collection. Using the vacuum technique, a “fresh” vacuum is always available.
 - Suitable for all ages, from young to old, the S-Monovette® is as individual as your patients.

Immunoassays

Beckman Coulter – Access 2 Immunoassay System



- Dimensions:** 500 × 900 × 610 mm (h × w × d)
Weight: 91 kg
Sample throughput: up to 100/h
Assays: > 50 pre-programmed, bar-coded immunoassay methods

- Highlights:** Designed to have the robustness of a reference-lab immunoassay analyzer in the convenient size of a benchtop instrument, the Access 2 Immunoassay System delivers quality, reliability and speed without sacrificing valuable floor space. It features an extensive immunoassay diagnostic-testing menu of more than 50 tests including AMH and TSH (3rd IS). Standardized reagent and assay testing menus can be used across all immunoassay platforms to drive laboratory efficiency and provide consistent results across healthcare networks.

Immunoassays

Beckman Coulter – UniCel Dxl 800 Access Immunoassay System



Dimensions: 1700 × 1710 × 970 mm (h × w × d)
Weight: 630 kg
Sample throughput: up to 400 tests/h
Assays: > 50 preprogrammed, bar-coded immunoassay methods

Highlights: It includes proven chemiluminescent technology and one of the highest throughput systems available on the market. High-volume labs can decrease process steps and improve turnaround time by simplifying and automating immunoassay testing to a single platform.

Beckman Coulter's immunoassay instruments have common software interfaces and consumables across the whole family, enabling operators to train more quickly, minimize inventory, and ensure consistency in results across platforms.

Immunoassays

Mindray – CL-900i Chemiluminescence Immunoassay Analyzer



Dimensions: 860 × 740 × 560 mm (w × h × d)
Weight: 130 kg
Sample throughput: up to 180 tests/h
Reagent Positions: 15
Assays: 79

- Highlights:**
- High throughput up to 180 tests per hour
 - One of the smallest benchtop CLIA analyzer
 - Reagent capacity with 15 positions
 - Single cuvette system
 - Dual substrate and automatically switch the empty one
 - Intuitive software interface, easy access to all functions
 - Continuously loading of Intelligent consumables management

Immunoassays

Mindray – CL-1000i/1200i Chemiluminescence Immunoassay Analyzer



Dimensions: 1400 × 760 × 600 mm (w × h × d)
Weight: 225 kg
Sample throughput: up to 180 tests/h
Reagent Positions: 25
Assays: 79

- Highlights:**
- High throughput up to 180 tests per hour
 - Benchtop analyzer
 - Large reagent capacity with 25 positions
 - Sample rack system
 - STAT lane
 - Single cuvette system
 - Dual substrate and automatically switch the empty one

Immunoassays

Mindray – CL-2000i Chemiluminescence Immunoassay Analyzer



Dimensions: 2150 × 1020 × 1200 mm (w × h × d)
Weight: 750 kg
Sample throughput: up to 240 tests/h
Reagent position: 36
Assays: 79

- Highlights:**
- up to 240 tests per hour
 - Measurement principle: enhanced ALP-AMPPD method
 - Reagent carousel: 36 reagent positions with non-stop refrigerating
 - Sample handling: up to 300 samples can be loaded in one batch, sample loading and offloading continuously by sample racks, fast prioritizing STAT samples
 - Continuously loading of reagents, substrate, cuvettes, wash buffer and waste bags

Immunoassays

Mindray – CL-6000i Chemiluminescence Immunoassay Analyzer



Dimensions:	2150 × 1166 × 1300 mm (w × h × d)
Weight:	580 kg
Sample position:	up to 480 tests/h
Reagent position:	36
Assays:	79

- Highlights:**
- Industrial highest throughput: up to 480 tests per hour
 - Measurement principle: enhanced ALP-AMPPD method
 - Reagent carousel: 36 reagent positions with non-stop refrigerating
 - Sample handling: up to 300 samples can be loaded in one batch, sample loading and offloading continuously by sample racks, fast prioritizing STAT samples
 - Continuously loading of reagents, substrate, cuvettes, wash buffer and waste bags
 - Zero daily maintenance

Immunoassays

Mindray – CL-8000i Chemiluminescence Immunoassay Analyzer

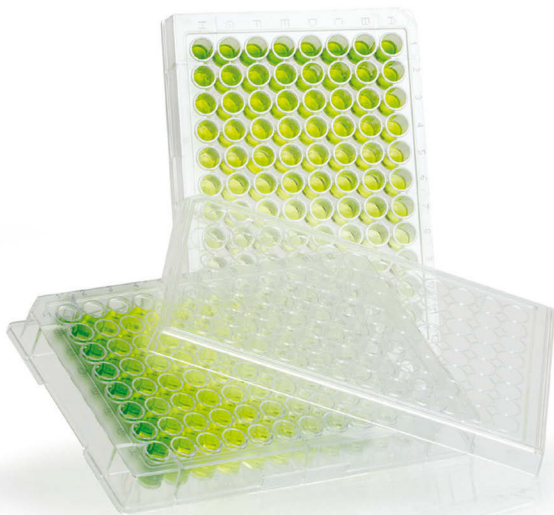


Dimensions:	2305 × 1150 × 1180 mm (w × h × d)
Weight:	789 kg
Sample throughput:	up to 500 tests/h
Reagent position:	36
Assays:	79

- Highlights:**
- Industrial leading throughput: up to 500 tests per hour
 - Sample handling: up to 300 samples can be loaded in one batch, sample loading and offloading continuously by sample racks, fast prioritizing STAT samples
 - Improving test result reliability and operational efficiency with new technologies such as Vortex-Ultrasound Mixing and FS-Sampling
 - Easy-to-use design: Ready-to-use calibrators/control, dedicated reagent management screen etc.
 - Flexible scalability: can integrate with BS-2800M

Immunochemistry

SARSTEDT – ELISA Plates / Micro test plates for immunoanalytics



- Highlights:** One of the analyses most commonly used is the Enzyme-Linked Immunosorbent Assay (ELISA). With this method, even the smallest concentrations of a range of substances (proteins, peptides, antibodies, hormones etc.) can be detected and quantified from complex solutions.

Integrated Systems

Mindray – M1000 Chemistry and Immunoassay Integrated System



Dimension:	CC: 2450 × 1150 × 1300 mm (w × h × d) IM: 2305 × 1150 × 1180 mm (w × h × d)
Throughput:	CC: 2,000 tests/h, up to 24,00 tests/h with ISE IM: up to 500 tests/h
Number of Parallel Tests:	CC: up to 69 tests IM: up to 36 tests

- Highlights:** M1000 is a chemistry and immunoassay integrated system for large laboratories, with high efficiency and accuracy. It supports up to 600 samples continuous loading at one time, and creative sample auto de-capping function. It adopts innovative technologies like 360-degree sample barcode scanning, PDR optical platform, HILL SI solution, timely environment pressure and CO2 monitoring, VU-Mix and FS-sampling, whole blood HbA1c with auto sample increment tests, delivering high efficiency and reliable patient reports in a short TAT.

Integrated Systems

Mindray – SAL 6000 Modular System



Sample throughput: Chemistry up to 1,200 tests/h (including ISE), Immunology up to 240 tests/h
No of channels: 68 (Chemistry) / 36 (Immunology)
Assays: 132

Highlights: The SAL 6000 is a high performance chemistry and immunology integrated system, combining BS-800 chemistry analyzer, CL-2000i immunology analyzer and the SPL 1000 sample process line. The system offers a large capacity of 300 samples with continuous loading by racks. It supports onboard sample pretreatment for HbA1c testing.

Integrated Systems

Mindray – SAL 9000 Modular System



Sample throughput: Chemistry up to 2,200 tests/h (including ISE), Immunology up to 480 tests/h
No of channels: 67 (Chemistry) / 36 (Immunology)
Assays: 132

Highlights: The SAL 9000 is a high performance chemistry and immunology integrated system, combining BS-2000 chemistry analyzer, CL-6000i immunology analyzer and the SPL 1000 sample process line. The system offers a large capacity of 300 sample positions and supports non-stop continuous sample loading. It offers a large capacity of 600 samples with continuous sample loading by racks, dedicated STAT channel, and sample tray direct loading and offloading.

Urine Screening

SARSTEDT – NFT Urine collection system



The first enclosed urine collection system from SARSTEDT for hygienic and needle-free sample collection (NFT = Needle Free Transfer).

Highlights:

- A needle is no longer needed – the Urine-Monovette® easily pierces the innovative NFT membrane for closed urine transfer
- No risk of needlestick injury
- No sharps container needed to dispose of the NFT products
- Available as Urine Cup NFT and 3-litre Urine Container NFT

Rapid Testing

SARSTEDT – Blood gas Monovette® and capillaries



Highlights:

- Blood gas collection systems for arterial, venous and capillary sampling with the smallest sample volumes and Ca²⁺ balanced heparin.
- The Ca²⁺ balanced heparin in spray-dosed droplet form enables rapid and optimal mixing of blood and anticoagulants.

The Blood gas Monovette® is available in 1 and 2 ml options and has been designed for venous and arterial blood collection. The blood gas capillaries offer a nominal volume range of 100 – 175 µl.

CSF and Alzheimer's Disease Diagnostics

SARSTEDT – CSF false-bottom tube



Highlights:

- Excellent recovery thanks to low-binding properties
- Routine-use primary container for sample collection and automated analytics
- Patient-friendly sample volume of 2.5 ml
- Cost-effective alternative to PET scan
- Reliable pre-analytics for optimum sample integrity

The new CSF false-bottom tube (art. no.: 63.614.625) meets the requirements for reliable pre-analytics in Alzheimer's disease diagnostics. The tube combines optimum low binding properties with standardized 75 x 13 mm dimensions for ideal handling and processing of this very special sample material.

Thanks to the special low binding property, the high-quality material prevents the binding of Alzheimer's disease biomarkers and allows for maximum recovery in the sample material for reliable dementia diagnostics. The CSF false-bottom tube is recommended as standard in the pre-analytical consensus protocol and has already been validated for the new immunoassay generation from Roche.

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Hematology



mindray



Blood Cell Counter
Integrated Hematology

Blood Cell Counter

Beckman Coulter – DxH 500 Series



Highlights:

The DxH 500 Series hematology analyzers can help improve clinical decision-making and efficiency. Built on proven cellular analysis technology, the DxH 500 series provides precise platelet counts and accurate first-pass results. The system's intuitive interface also makes it easier to learn and operate.

- Low aspiration volume of 12 μ L (open vial mode)
- Easily loads up to 50 samples without the need to stop analysis (DxH 560 AL Hematology Analyzer)
- 27 parameters with 5part diff
- Executes any command in three touches or less
- Up to 30,000 patient results, including graphics, flags, codes, and messages
- Stores and manages just three reagents, with simple and quick replacement.

Blood Cell Counter

Beckman Coulter – DxH 690T Hematology Analyzer

Dimensions:
755.7 × 1740 × 828 mm (w × h × d)

Weight:
254 kg

Sample throughput:
up to 100 samples/h

Power consumption:
520 W*



Highlights: The DxH 690T offers all the benefits of Beckman Coulter's flagship DxH 900 hematology analyzer to mid-size labs, including an industry leading 93 % first pass yield and the Early Sepsis Indicator. The only FDA-cleared hematology biomarker for sepsis, the ESId measures monocyte distribution width to support early detection of life-threatening sepsis for patients in the ED.

- Automate QC processes to complete tasks with 75 % fewer steps, and 40% faster software response time, than previous generation mid-volume hematology analyzers
- Apply extensive sample-specific rule-writing capabilities to automate analysis and standardize SOP sample handling – without the need for middleware

Blood Cell Counter

Beckman Coulter – Early Sepsis Indicator



Highlights:

A first-of-its-kind, hematology-based cellular biomarker, the FDA cleared Early Sepsis Indicator is designed to help emergency department physicians identify patients with sepsis or at risk of developing sepsis within 12 hours of ED presentation.

- Results are automatically reported as part of a routine complete blood count (CBC) with differential for adult emergency department patients
- Combined with clinical signs and symptoms and WBC results, the Early Sepsis Indicator can inform critical decision making in adults in the emergency care setting

Blood Cell Counter

Beckman Coulter – PK7400 Automated Microplate System



Highlights: Streamlines workflow by simplifying both routine tasks and maintenance with the new features and intuitive software available on the PK7400 Automated Microplate System. The PK7400 includes reliable high-performing PK methodology that helps laboratories maximize productivity and optimize resources.

- The terraced microplate—designed specifically for hemagglutination—increases the reliability of each test within the following menu: ABO/Rh, Red blood cell screening, Syphilis (TP)
- It boosts testing efficiency with the highest throughput available of any high-volume donor-center system
- User-friendly software

Detecting and measuring nanoplastics in blood

Plastics are a part of everyday life, and an increasingly concerning factor of global environmental pollution. They also have infiltrated our bodies as microparticles (MPs) and nanoparticles (NPs), found even in placentas supporting foetal life. And they are in our blood. Now, researchers in Spain have developed a new method to detect and measure nanoparticles in human peripheral blood that is faster and more accurate than some current techniques being used.

Report: Cynthia E. Keen

Plastic MPs and NPs are ingested through oral intake of food and liquids, air inhalation, and exposure to the skin, such as bathing and using personal care products containing nanoparticles. Ranging in size up to 5 mm for MPs and from 1 nm to 1000 nm for NPs, they most commonly enter the body through food, drinking water, and use of plastic food contact materials.

Microplastics and nanoplastics are now known to induce inflammation, oxidative stress, immune response, and cell death through apoptosis and necrosis. When nanoplastics reach the blood stream, they circulate throughout the body. Because almost all blood from the intestinal tract transfers through the liver, this is a particularly vulnerable organ. Accumulations of plastic particles in the liver can penetrate the epithelial barrier.

A study conducted by Chinese researchers at Shandong University's Institute of Toxicology in Jinan, determined that that polystyrene nanoparticles increased blood-brain barrier (BBB) permeability and accumulated in the brains of mice. This accumulation triggered activation of microglia, the cells of the brain that regulate brain development, maintenance of neuronal networks, and injury repair. The researchers reported that their study revealed that polystyrene nanoparticles induced microglia activation and neuron damage in the mouse brain.

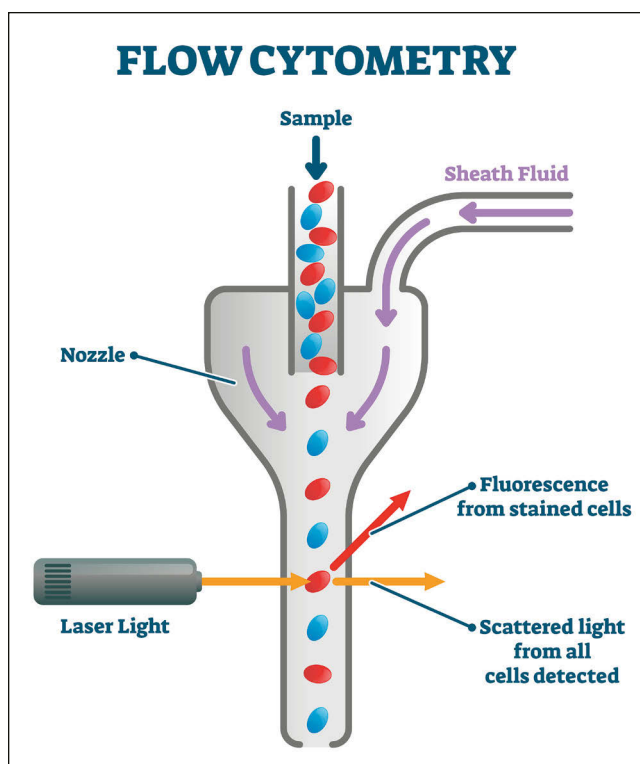
Barcelona study reveals prevalence of plastics in the blood

Although more than a decade has been spent in intensive global research, the extent of harm plastic particles can cause to the human body is still unknown. Tens of thousands of variables are involved in terms of assessing exposure, hazards, and effects on human anatomy. Accurate and reproducible detection and measurement techniques are essential for all research.

A Universitat Autònoma de Barcelona research team has developed a simple, fast, robust, and reproducible method to detect nanoplastics in human peripheral blood using a flow cytometry

method. Flow cytometry is a laser-based technique used to detect and analyze the chemical and physical characteristics of cells or particles. The researchers' method, described in MethodX, is based on the fluorescent staining of Nile red, a dye that binds to the surface of plastics and neural lipids. Lead author Roser Salvia and colleagues used the lipophilic dye Nile Red, in combination with fluorescence techniques and nanocytometry to determine the presence in human peripheral blood of the four most common plastics produced in the world.

196 people living in the Metropolitan Area of Barcelona donated blood, ranging in age from new-borns to age 90. The donor cohort included 37 healthy individuals, 36 new-born infants,



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and 123 patients with type 1 diabetes multiple myeloma, three types of leukaemia, or non-small cell lung cancer. The researchers recruited the patients at different disease timepoints, which ranged from diagnosis and treatment to post-hematopoietic transplantation.

Preventing surface and airborne sample contamination

Their study to assess the capabilities and accuracy of their flow cytometry method was designed to prevent surface and airborne sample contamination by plastic particles and the environment. All measurements were performed in triplicate.

Based on the blood analysis, all participants had plastic particles in their blood. The researchers determined accumulation of

plastics in participants aged 40 to 90 years slightly decreased as based on older age. This suggests that the accumulation [of NPs] in other tissues, such as adipose tissue, cannot be ruled out.... More studies will be needed to enlighten how plastics are accumulated with age, as an age-related phenomenon of redistribution and exposure to plastic pollution!

The researchers also hypothesized that the air pollution in and around Barcelona was a potential source of plastic particle airborne inhalation. They conducted a laboratory study with mice, with results suggesting their hypothesis is accurate. The team recommends that studies be conducted to assess the accumulation of plastics in people living in rural areas and locales with different population densities.

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Flexible slide racks

Blood Cell Counter

Mindray – BC-700 Series Hematology Analyzers with ESR



Sample throughput: CD (CBC + DIFF): 80 t/h CD + ESR: 40 t/h

- Highlights:**
- Revolutionary hematology analyzers integrated with ESR measurement function.
 - Adopting the high-end SF-Cube 3D analysis technology, delivering extraordinary performance in reliable counting and differentiation of abnormal samples.
 - The innovative parameter – optical PLT-H in every CBC & DIFF test, delivering reliable platelet counts even with interference.

Blood Cell Counter

Mindray – BC-6200/6000 Auto Hematology Analyzer



Sample throughput: up to 110 t/h

- Highlights:**
- Unique SF Cube 3D cellular analysis technology for WBC 6-part diff count including IMG
 - NRBC in every CBC+DIFF result
 - Automatic rerun & reflex in case of abnormal results
 - BC-6200 with RET channel can provide optional Reticulocytes and PLT-O parameters and perform automatic 8-times PLT-O counting for thrombocytopenia samples.

Blood Cell Counter

Mindray – BC-6800Plus Auto Hematology Analyzer



Sample throughput: CBC+DIFF 200 t/h, RET 120 t/h, BF 40 t/h

- Highlights:** BC-6800Plus is currently the fastest standalone hematology analyzer in the world, which can process 200 CBC+DIFF samples/h and 120 RET samples/h. Notably, the ERP channel can provide more research parameters such as MCHr and HDW, which can help early diagnosis of various types of anemia.

Blood Cell Counter

SARSTEDT – Microvette® APT – for routine capillary blood analysis



- Highlights:**
- Capillary blood collection system specially developed for automated processing in blood count analysis systems
 - Greater flexibility thanks to two collection techniques – precise filling volume with end-to-end capillary (250 µl) and entire collection rim (250 – 500 µl) for optimum mixing with a K2 EDTA preparation
 - Meets all the important processing requirements for a primary container and has a leak-proof cap with pierceable membrane for safe transportation and shipping
 - Improves the turn-around time in capillary blood analysis and reduces the need for repeated blood collection
 - Available in ISO and EU colour code

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Blood Cell Counter

SARSTEDT – S-Monovette® ThromboExact – Pseudothrombocytopenia



Highlights: The S-Monovette® ThromboExact has been developed especially for anticoagulant-induced pseudothrombocytopenia. Generally, pseudothrombocytopenia is caused by thrombocyte aggregation. Early detection avoids the consequences of a thrombocytopenia misdiagnosis.

This blood collection tube is validated internally by SARSTEDT and externally at the University Hospital Rostock, Germany.

Integrated Hematology

Mindray – CAL 6000/8000 Cellular Analysis Lines

Dimensions: Depending on configuration
Weight: Depending on configuration
Sample throughput: CBC+DIFF: up to 1000 samples/h
 SC-120: up to 240 slides/h
 MC-80: up to 120 slides/h



Highlights:

- Fully Integrated with Mindray hematology analyzers, slide maker & stainer and new digital cell morphology analyzer
- Flexible configuration with buffer module, start / stock yard and turn module
- Accurate results of abnormal cells with advanced detection technology SF-Cube
- Streamlined laboratory workflow with automatic rerun and reflex measurement

- For digital cell morphology
- The cell images look more three-dimensional, sharper in color, and clearer
- Automatically choose the optimal mode for pre-classification of cells with higher efficiency
- up to 60 slides/h

Hematology

Integrated Hematology

Beckman Coulter – DxH 900 Hematology Analyzer with Reagent Preparation Instrument (RPI)

Dimensions:

755.7 × 1740 × 828 mm (w × h × d)

Weight:

254 kg

Sample throughput:

up to 100 samples/h

Power consumption:

520 W

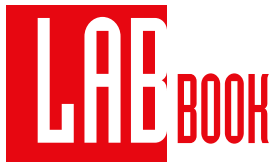
**Highlights:**

Ideal for mid- to high-volume clinical laboratories performing complete blood counts and white blood cell differential tests while minimizing repeat testing, allowing the right results to be delivered the first time as well as achieving superb RBC, PLT, and WBC differentials through near native-state cellular characterization and precise flagging.

- Optimized processes help your laboratory maximize staff time through fewer slide reviews, automated QC, longer walkaway and system uptime
- Most reportable results per sq m with industry-leading 93% first-pass yield and a > 40% smaller footprint than competitive instruments
- Exclusive Early Sepsis Indicator: a one-of-a-kind FDA-

cleared hematology biomarker designed to help ED physicians identify sepsis sooner

- The analyzer features a variety of workcell configurations to match laboratory workload, with a mounted user interface, onboard power computer and wireless peripherals, eliminating the need for extra hardware
- Newly introduced, the DxH Concentrated ECO Diluent reduces both the number of diluent box reloads and storage space by 94%, minimizing daily lab tasks
- DxH Concentrated ECO Diluent uses an RPI with a convenient built-in water purification system and an intuitive software system that alerts when the cubitieres need changing



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Pathology

Histology Equipment
Information Technology
Sample Collection

clinisys

Enabling healthier communities



SARSTEDT



SAKURA

Histology Equipment

Sakura Finetek – Tissue-Tek Genie Advanced Staining System



Dimensions: 1650 × 1600 × 750 mm (w × h × d)
Weight: 585 kg

- Highlights:**
- Pay-per-slide pricing ensures transparent cost management.
 - Unique standard 2hr 45min TAT for Sakura's RTU biomarkers to support an efficient workflow.
 - 130+ ready-to-use antibodies and probes.
 - A closed system limits exposure to chemicals and allows easier IVDR compliance.
 - 30 fully independent stations allow maximum flexibility, with limited downtime, and no case splitting.
 - GenieOnline partnership ensures worry-free stock management and easy verification of new biomarkers.
 - Optimal, ready-to-use reagents.

Information Technology

Clinisys – DaVinci



- Highlights:** Clinisys DaVinci – user-friendly solution designed by pathologists for increased productivity
- With our anatomical pathology solution you can optimise your pathology processes, and your employees can work more efficiently and more collaboratively. Results are available quicker and, of course, this benefits the patients. Our solution supports all traditional pathology processes, with user-friendly and task-oriented workflows – starting from order communication and registration all the way to the delivery of the results.

Sample Collection

SARSTEDT – Digitising Pre-Analytics with S4DX System



- Highlights:** Established pre-analytical quality monitoring
- Document transport time and temperature
 - Monitor sample quality digitally according to ISO 15189
 - Link pre-analytical data such as the time of sampling, the verification of the patient and, if necessary, his or her condition to the diagnostic process
- Optimised work processes and reduce laboratory costs**
- Reduce costs in sample logistics
 - Automate sample receipt procedures
 - Minimise repeated measurements
 - Reduce training outlay for collection sites
 - Optimise customer communication
- Reduced pre-analytical errors**
- Avoid errors such as "wrong patient", "wrong blood in tube" and "missing material"

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DNA

Amplification
Extraction
Research Use Only



More certainty with methylation tests for early detection of cancer

A second-generation lab test for early detection of cervical cancer is the most recent addition to Oncnostics' portfolio. In particular, the company's solution will help women in countries with limited cancer screening. Moreover, new research on the early detection of vulval and vaginal cancer might soon enable the development of tests for these cancers.

Report: Sonja Buske

In 2015, Oncnostics, a then three-year-old University of Jena spin-off, launched GynTect, a test for the early detection of cervical cancer. It uses DNA methylation as a biomarker that occurs specifically in cervical cancer or its precursors. At that time, GynTect was one of the first solutions worldwide to apply this technology to the early detection of cancer. Today, the test is marketed in several European countries and in August 2022, it was approved in China.

Since GynTect detects six methylated DNA regions, a maximum of ten samples can be processed at a time which makes GynTect more resource-intensive than conventional lab tests. Consequently, the test is less suitable for use in countries with little or no screening and limited lab equipment. Thus, Oncnostics developed a second generation of the test which was presented at last year's Medica: ScreenYu Gyn. As it detects only one methylated DNA region it can be more easily automatized and up to 100 samples can be analysed in one batch. It was



Dr Alfred Hansel with his lab tests for the early detection of gynaecologic cancers.
© Sonja Buske

approved in May 2022 but is not being used yet. 'Currently, we make the test available only to interested researchers,' says Dr Alfred Hansel, co-founder and CEO of Oncnostics, and adds 'while we did our own study with 600 samples, we want to have the test verified by an independent third party.' ScreenYu Gyn does not yet reach its predecessor's accuracy; nevertheless, it is an alternative for developing countries and rural and remote areas. Dr Hansel points out that 'most new cancers occur in countries with little screening. There, our tests could be a useful tool.'

Self-pay service

In Germany, the tests are currently a self-pay service, i.e., the costs of the tests are not covered by statutory health insurers but have to be paid by the women themselves. Particularly women with a suspicious pap smear or a positive HPV test are interested in the Oncnostics test to get an unambiguous result before the gynaecologist repeats the test three to twelve months later. 'A suspicious test result does not necessarily mean cancer,' Dr Hansel explains and adds that 'abnormal tissue and HPV infections usually heal by themselves; therefore physicians tend to wait and recheck after a certain period of time. For many women, this time of uncertainty means enormous mental stress, so they use our test to clarify the initial finding. GynTect not only reliably detects existing tumours; it can also provide information on the probability of cervical cancer.'

Early detection of vulval and vaginal cancer

To date, there is no test for the early detection of vulval and vaginal cancer. Due to the unspecific symptoms, it is usually an incidental finding. A methylation test using the same biomarkers as the cervical cancer test might be a solution, as Hansel and his team found in initial studies with a few hundred samples from two university hospitals. 'Currently, our test recognizes 80 to 90 percent of all cancers, and we fully expect to reach 100 percent soon,' the CEO says. In two years at most, he estimates, that goal will be reached since he and his team are focusing their full efforts on the project. If the health insurers start to pay for the test, the development might even be faster than with the previous two tests since there are no alternatives.

Amplification

SARSTEDT – White Multiply PCR Plates



Highlights: In addition to a generally improved quality, SARSTEDT now offers optimized white color variants for better detection sensitivity in qPCR. In addition, we have expanded our PCR plate range with high-purity EtO-treated variants (Biosphere plus quality) as well as DNA & protein low binding variants. With our Biosphere plus variants, we offer the maximum and unsurpassed purity standard for an absolutely reliable absence of DNA or other biomolecules. The low binding variants are our contribution to the increasing use of PCR consumables for other applications, e.g. for sample storage of smallest volumes or for preparing dilution series so that all biomolecules can be recovered from the wells.

Extraction

Promega – Maxwell® CSC Instrument



Dimensions: 330.2 × 299.7 × 345.2 mm (w × h × d)
Weight: 11 kg
Sample throughput: up to 16 samples / 25 – 75 minutes
Assays: Blood, FFPE, buffy coat, bone marrow, cells, serum, stool, urine etc. (CE-IVD) or tissue, food, and many more (RUO)

Highlights: Automated DNA and RNA extraction – IVDR-compliant

- Generates consistent, high-quality nucleic acid for use in downstream diagnostic amplification assays
- Works with multiple sample types, e.g., blood, FFPE, tissue, buccal swabs etc. (CE-IVD) or cells, saliva, food, plants and many more (RUO)
- Paramagnetic particle use = no cross-contaminations
- Reliable sample tracking with integrated barcode scanner
- Flexible, dual-mode software with separate RUO mode for research-based DNA & RNA extractions
- Designed and manufactured under cGMP

Extraction

Promega – Maxwell® CSC 48 Instrument



Dimensions: 533.4 × 355.6 × 533.4 mm (w × h × d)
Weight: 27 kg
Sample throughput: up to 48 samples / 25 – 75 minutes
Assays: Blood, FFPE, buffy coat, bone marrow, buccal swabs, stool, urine etc. (CE-IVD) or tissue, food, and many more (RUO)

Highlights: Automated nucleic acid extraction – IVDR-compliant

- Extraction of high-quality nucleic acid with minimal hands-on time
- Processes different sample types for downstream applications in molecular diagnostics
- Paramagnetic particle use = no cross-contaminations
- Integrated vision system for error prevention
- Reliable sample tracking with integrated barcode reader
- Dual-mode software for both molecular diagnostics (IVD-mode) and research applications (RUO-mode)
- Designed and manufactured under cGMP

Research Use Only

SARSTEDT – Low DNA Binding Micro Tubes



Highlights: As the trend towards decreasing sample volumes continues, it is increasingly important to minimize potential interaction between the analyte and tube. Our low protein and new low DNA binding micro tubes are specifically designed to meet the requirements in protein and DNA analytics while maximizing recovery rates.

Microbiology

Automation



Automation

Beckman Coulter – DxM Autoplak Automation



Dimensions: 1850 × 2000 × 920 mm (w × h × d)

Weight: 500 kg

- Highlights:** Robust microbiology automation in a flexible and compact footprint
- Increased Productivity**
- Inoculate and streak up to 125 plates per hour
 - Load up to 120 samples in various sizes continuously with random access capability
- Automated Process**
- De-cap and re-cap multiple specimen containers
 - Implement plate streaking with various streaking patterns to fit your laboratory needs
- Reduced Errors and Improved Efficiency**
- Ensure standardized technique and improve colony isolation with automated streaking. Minimize cross-contamination with loop incineration, HEPA filtration and one-way sample flow

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Other

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COULTER**



First-tier rapid serology testing for Lyme disease

Lyme disease, the most common tick-transmitted bacterial infection in the world, is challenging to diagnose. Initial early stage symptoms may include skin rash, fever, headache, fatigue, swollen lymph nodes, and/or body and joint aches. However, these symptoms are also associated with many other diseases and medical conditions.

Report: Cynthia E. Keen

In many cases, Lyme disease can be diagnosed based on clinical findings and a history of a tick bite or probable exposure. Laboratory testing is problematic, both with respect to confirming and ruling out the disease. Lyme disease serologic testing measures the levels of antibodies generated by the body in response to the infection. However, these antibodies may take several weeks to develop to a level where they can be reliably detected. Consequently, both false negative tests and false positive tests are a problem with first-tier Lyme serological assays. For this reason, a second-tier laboratory test is needed to confirm initial positive findings.

An on-site, point-of-care, rapid testing system that produces first-tier testing results within 3–15 minutes alleviates delays associated with initial analysis by an external laboratory. This rapid test, utilizing an advanced immunofluorescence-based lateral-flow technology (Quidel Sofia 2 Lyme+Fluorescent Immunoassay with CE Mark), has been available for clinical use in Europe since 2018, and also in the United States (Quidel Sofia 2 Lyme Fluorescent Immunoassay) (FIA).



Treating early stage localized Lyme disease with antibiotics

Positive test results help reinforce a physician's decision to prescribe antibiotics while awaiting the results of a second-tier test, especially if the physician believes that a patient may have been exposed to ticks. Antibiotics are very effective in treating early stage localised Lyme disease, and to prevent it from developing into second and third stages that are more difficult to cure and can cause serious medical problems.

The rapid test is also useful for patients who presented with Lyme disease symptoms but had negative test results, and who have returned weeks later for a follow-up test to definitively confirm the initial results.

'In my opinion, the rapid FIA test's primary benefit is actually to rule out Lyme disease, not diagnose it, because it has a high negative predictive value (NPV),' says Professor of Laboratory Medicine and Pathology Elitza S. Theel, PhD, who also co-directs Mayo Clinic's Vector-Borne Diseases Laboratory Service Line in Rochester, Minnesota, US.

Researchers at Massachusetts General Hospital in Boston are the first to formally evaluate the performance of this single-use cartridge-based assay using lateral flow technology with an instrument reader, comparing it with a next-generation polyvalent enzyme immunosorbent assay (EIA) testing system (Zeus ELISA *Borrelia* VlsE1/pepC10 IgG/IgM (Zeus VlsE, Zeus Scientific), currently in use at the hospital. They report in the *American Journal of Clinical Pathology* that both of these first-tier serology assays show excellent agreement when combined with second tier immunoblot tests as a part of a standard two-tier testing protocol.¹

¹ Evaluation of the Rapid Quidel Sofia 2 Lyme Immunoassay as a First-Tier Test in a Two-Tier Testing Algorithm for Lyme Disease: Comparison to the Zeus ELISA *Borrelia* VlsE1/pepC10 IgG/IgM Assay Followed by Immunoblot Get access Arrow; <https://doi.org/10.1093/ajcp/aqad007>



Rapid first-tier testing at a hospital, clinic, or doctor's office may be very good news for the estimated 600,000 individuals who annually contract Lyme disease. Central and Eastern Europe as well as Eastern Asia have the highest incidence, led by Scandinavian and Baltic countries, Austria, the Czech Republic, Germany, and Slovenia, according to statistics from the US National Institutes of Health (NIH).

'The test is well suited for laboratories and settings that wish to perform rapid Lyme testing on demand in a random-access mode as opposed to many Lyme assays that require batching,' writes the study's principal investigator, Elizabeth Lee Lewandrowski, PhD.

No refrigeration needed

The Sofia 2 analysers also offers additional benefits to healthcare providers. Testing materials do not require refrigeration. The test analyser is compact and portable, interfaces directly with most laboratory information systems (LIS) and may be configured for either single tests or batch testing to accommodate fluctuating volumes. Unlike most EIA testing systems, it provides differentiated IgM and IgG results, the FIA will generate differentiated IgM and IgG antibody results in a single test. (IgM antibodies are associated with early-stage Lyme disease; IgG antibodies appear later after infection).

For the comparative evaluation, the researchers tested serum specimens from 179 patients experiencing potential Lyme disease symptoms who presented at Massachusetts General Hospital. The researchers reported that positive predictive agreement (PPA) was 78.8% and negative predictive agreement (NPA) was 94.5%, which they said demonstrated clinically acceptable performance. Results of first-tier Lyme diseases tests differ, based on manufacturer, a key reason why a two-tier testing system for positive findings is a necessity. Additionally, the first-tier tests had a 96.2% PPA and a 100% NPA with the second tier immunoblot test performed at Mayo Medical Laboratories in Rochester, MN.

Global research initiatives are underway to develop direct

diagnostic tests able to detect all major *Borrelia* species known to cause Lyme disease. The challenges to overcome are significant.

'Accurate and timely diagnosis of Lyme disease, particularly during infection, remains one of the greatest unmet needs in the realm of infectious disease diagnosis,' comments Theel. 'As pathologists and microbiologists, we have been moving our diagnostic capabilities for Lyme disease incrementally forward, with the development of increased sensitivity or novel direct detection methods. But we are still far from closing this diagnostic gap.'



PROFILE

Elitza S. Theel, PhD, is Director of the Infectious Diseases Serology Laboratory, Co-Director of the Vector-Borne Diseases Laboratory Service Line, and Professor of Laboratory Medicine and Pathology at Mayo Clinic in Rochester, Minnesota, US. She is a clinical microbiologist specializing in infectious disease serologic testing. Her specific interests and clinical focus include developing and evaluating novel serologic assays for the detection of vector-borne diseases, viruses, and dimorphic fungi.



PROFILE

Elizabeth Lee Lewandrowski, PhD, is an Assistant Professor of Pathology at Harvard Medical School and Research Faculty and a Clinical Laboratory Scientist in the Department of Pathology at Massachusetts General Hospital in Boston. Her primary research interests are in laboratory markers of cardiovascular disease, Lyme disease, and outcomes research in point-of-care testing. Dr Lewandrowski is a member of the Advisory Board of Harvard Medical School Harvard Health Publishing Lyme Wellness Initiative and the Research Director of Invisible International, an organization which offers free online courses about diagnosing and treating vector-borne diseases.

Blood Glucose

Nova Biomedical – StatStrip Glucose/Ketone*



- Highlights:** The only glucose meter technology cleared by the US FDA across all professional and healthcare settings, including critical care.
- Measures and corrects glucose errors caused by abnormal haematocrit levels
 - Measures and corrects errors caused by electro-chemical interferences
 - Measures blood beta-hydroxybutyrate, the preferred ketone for diagnosing ketoacidosis
 - Available as a fully connected, wi-fi meter, or a smaller Xpress* style meter
- *StatStrip Glucose only in the US*

Blood Gases/Electrolytes/Metabolites/Oximetry

Nova Biomedical – Prime Plus Critical Care Analyser



- Assays:** PO₂, PCO₂, pH, Hct, tHb, MCHC, Na, Cl, K, iCa, TCO₂, iMg, Glu, Lac, Urea (BUN), Creat, ePV, SO₂%, O₂Hb, COHb, MetHb, HHb, HbF*, tBil*

- Highlights:** Stat Profile Prime Plus offers a complete test menu panel in about one minute, along with bidirectional connectivity, a robust data management system, and comprehensive cybersecurity protection.
- This comprehensive critical care menu includes iMg, urea and creatinine and calculated tests for ePV, MCHC and OI.
- *Not available in the US or Canada*

Endocrine

Nova Biomedical – Allegro* – a fast simple capillary blood analyser



- Assays:** HbA1c, Lipids panel, PT/INR, CRP, blood glucose and creatinine, urine albumin and creatinine
- Highlights:** Allegro* offers a clinically important menu of 10 measured and individually selectable tests, plus 7 calculated tests. All tests are measured with disposable, ready-to-use cartridges or test strips, and are easily performed by non-technical personnel.
- Capillary fingerstick samples for all blood tests
 - Immediate test results during the patient visit
 - Reduces patient follow-up visits and costs
- *Not available in the US or Canada*

Clinical Chemistry

Nova Biomedical – StatSensor Creatinine



- Highlights:** Fingerstick capillary testing for creatinine
- The StatSensor Creatinine is a handheld analyser and miniaturized, single-use biosensor for whole blood creatinine testing. StatSensor Creatinine's advanced technology enables simple, rapid, and accurate assessment of renal function by fingerstick capillary blood sampling at the point of care. Available as a fully connected meter, or a smaller Xpress* style meter.
- Capillary sampling
 - Creatinine and eGFR results in 30 seconds
 - 1.2µL sample
 - Calculates eGFR by CKD-EPI and MDRD equations
- *Not available in the US and Canada*

Urinalysis

Beckman Coulter – DxU 810c Iris Urine Chemistry Analyzer



Highlights:

A fully automated urine chemistry analyzer, it produces quantitative results for specific gravity, semiquantitative results for glucose, blood, leukocyte esterase, bilirubin, urobilinogen, pH, protein, ketones and ascorbic acid; and qualitative results for nitrites, color and clarity. Specific gravity is provided by an onboard refractometer.

Enhances the detection of interference with an ascorbic acid test pad that helps spot false negatives or decreases results in blood, nitrite, bilirubin, or glucose. The ascorbic acid reading can alert the operator of this possible interference.

The DxU 810c Iris has continuous strip loading and auto start rack loading capabilities. Its throughput is 210 samples/h, with the first result provided in less than 2 minutes. It can hold a maximum of 300 strips, with a storage capacity of 10,000 patient records.

Urinalysis

Beckman Coulter – DxU Microscopy Series Urine Microscopy Analyzer



Highlights:

The DxU Iris Microscopy Series automated urine microscopy analyzer addresses the need for accurate urine particle analysis providing high levels of throughput. The series consists of the DxU 850m Iris with a throughput of 101 samples/h and the DxU 840m Iris with 70 samples/h.

Using industry-leading technology with proprietary Digital Flow Morphology technology and Auto Particle Recognition software, it captures and isolates digital images of particles in urine or body fluids. The analyzer auto-classifies 12 urine particles based on particle size, shape, contrast and texture, reducing manual microscopic review rates.

Operators have the option of further classifying particles into 27 pre-defined sub-classifications specific to types of casts, crystals, non-squamous epithelial, dysmorphic, and others.

Other

Nova Biomedical – EMS Stat*



Highlights:

Lactate, haemoglobin, haematocrit, glucose, and ketone for early patient assessment and treatment

- Fingerstick capillary sample
- Results as fast as 6 seconds
- Laboratory-quality accuracy
- Durable carrying case holds meters, single-use biosensors, controls, and lancets

EMS Stat* offers simple, fast, and accurate testing in the field. Two meter systems are available. One provides patient data storage plus wireless connectivity to external data managers, the other provides data storage only.

*Not available in the US and Canada

Other

Nova Biomedical – StatStrip Lactate / Haemoglobin/Haematocrit*



Highlights:

Fingerstick capillary testing for Lac, Hb, and Hct

The StatStrip LAC/Hb/Hct is a handheld, easy-to-use meter that measures lactate, haemoglobin and haematocrit at the point-of-care using two disposable biosensors and tiny capillary blood samples for all tests. Available as a fully connected, wi-fi meter, or a smaller Xpress style meter.

- Capillary sampling
- Measured Hb and measured Hct in 40 seconds from 1.6µL blood
- Measured lactate in 13 seconds from 0.6 µL blood

*StatStrip Lactate only in the US and Canada

Other

SARSTEDT – Minivette® POCT / Capillary Blood Collection



Highlights:

- Collection devices for Point-of-Care tests
- Easy sample recovery
- Precise and dispensing of small whole blood volumes
- Prevents spillage during transfer
- Volume range: 10 µl – 200 µl
- Preparations: neutral, heparin and EDTA

Urinalysis

Beckman Coulter – DxU Iris Workcell Automated Urinalysis Solution



Highlights:

Using proprietary Digital Flow Morphology technology with Auto Particle Recognition Software which delivers standardized results using AI to recognize particles, the DxU Workcell helps isolate, identify and characterize urine particles on the screen to virtually eliminate the need for manual microscopy.

- **Minimizes operator intervention and interruptions**
- **Intuitive user interface software**
- **Improves efficiency** of urinalysis testing and reduces manpower with iWARE Integrated Urinalysis Software, providing onboard validation and result verification in a single step.
- **Improves clinical information.** The Body Fluid module on the DxU microscopy is the only FDA-cleared urinalysis system and with linearity down to zero. The results are streamlined, as there is no need to interrupt the analyzer to switch to body fluid mode. Provides a standardized, fully automated method for the analyses of RBC count and nucleated cell count in cerebrospinal, synovial and serous fluids.
- **Increases productivity**

MED engineering International

The trade journal for designers and developers of medical therapy and diagnostic devices



Request your free sample booklet at
kundenservice@mgo-fachverlage.de



Information Technology

LIS/Middleware/POCT

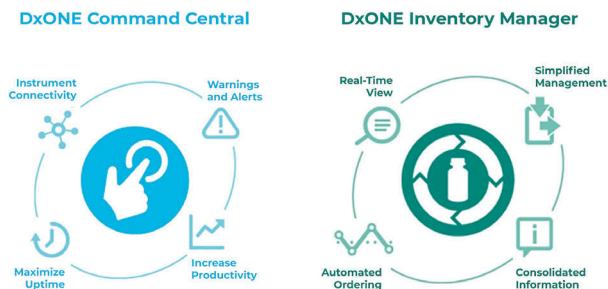


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LIS/Middleware/POCT

Beckman Coulter – DxONE Information Management Solutions



DxONE Command Central: The system can connect up to 18 instruments or automation systems and up to 5 networked DxONE Command Central workstations within a single laboratory, allowing operators to place DxONE Command Central workstations in prime laboratory locations for increased flexibility. DxONE Command Central maximizes workflow efficiencies by providing a real-time view of laboratory systems from a single point of control.

DxONE Inventory Manager: The automated, end-to-end software application increases operational efficiency by automatically recording, tracking, and optimizing a laboratory's consumables. With the manual tasks of receiving stock, monitoring system consumption, and reordering, now managed efficiently by the DxONE Inventory Manager laboratory inventory management system, laboratory staff can focus on the more demanding work required of a lab for ever more accurate patient test results.

LIS/Middleware/POCT

Beckman Coulter – Remisol Advance



Highlights: Remisol Advance is an enterprise data management solution that can help improve sample workflow through consolidated management, drive consistency through network standardization across multiple sites, create efficiency through auto verification, and improve reliability by integrating quality control management. It is a unique software product that consolidates patient test information from multiple instruments in the lab or from multiple labs in the hospital network. Remisol Advance features virtualization capability to help reduce failure points and increase uptime.

LIS/Middleware/POCT

Clinisys – GLIMS

Highlights: Clinisys GLIMS – the most widely used LIS in Europe. Clinisys GLIMS is a high-performance laboratory information system (LIS) that allows you to organise and automate all processes exactly as you want them: from order entry and instrument control to results reporting, invoicing and statistics. Thanks to the rich functionality of Clinisys GLIMS your laboratory can work more efficiently. You save costs and resources, while offering an enhanced service for requesters and patients – today and tomorrow.

LIS/Middleware/POCT

Clinisys – GLIMS Genetics

Highlights: Clinisys GLIMS Genetics – digital workflows for the entire genetic spectrum. Our genetics laboratory solution covers the entire genetic spectrum including the latest methods such as next-generation sequencing. It can be used as a standalone solution with a gene panel and variant results management, interconnected with other LIS systems and essential interfaces to all common expert systems. It can also be configured as part of a complete diagnostics LIS or be connected to order entry and result reporting systems such as Clinisys CyberLab.

LIS/Middleware/POCT

Clinisys – CyberLab



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**Clinisys
CyberLab**



**Easy,
error-free
order entry**



**Flexible
sample
collection
workflows**



**Feature-rich
result
consultation**



**Intelligent
and secure
guidance**

Highlights: Clinisys CyberLab – streamline communications between healthcare providers and laboratories

Our solution is a customisable, intelligent order entry and result consultation solution, helping you provide high-quality patient care. Clear, fast and correct communication between care providers and laboratories is key in enabling high-quality patient care. From order entry, through sample collection, to result consultation, Clinisys CyberLab keeps you connected – anytime, anywhere.

LIS/Middleware/POCT

Clinisys – vianova Labor



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**Clinisys
vianova Labor**



**75 mio
tests**
processed annually



**80+
customers**
in Germany and
Switzerland



**100%
compliance**
with national guidelines
and standards

Highlights: Clinisys vianova Labor – high efficiency, rapid communication of results, standardised workflows

Clinisys vianova Labor is a unique, patient-oriented LIS system that allows users to manage a wide range of laboratory processes, simply through configuration. It is the ideal solution wherever high efficiency and rapid information availability are needed. Clinisys vianova Labor is a multidisciplinary LIS that offers complete support for all key disciplines as clinical chemistry, blood bank, microbiology, hygiene, veterinary medicine.

LABBOOK 2023

Please visit us at
healthcare-in-europe.com

LIS/Middleware/POCT

Mesalvo – LabCentre



Highlights: LabCentre is a laboratory and pathology information management system. It helps doctors, scientists, technologists and management staff to track samples and testing processes, communicate results to other health professionals, and monitor costs and reporting.

LabCentre supports the following disciplines:

- Blood sciences
- Microbiology
- Hygiene
- Transfusion medicine
- Pathology
- Billing
- Order Entry System

Other Applications

Blood Collection
Saliva Collection
Pipette Tips
Centrifuges
Incubators
Specialties

 **SARSTEDT**

Hettich

Blood Collection

SARSTEDT – Multi-Safe Disposal Boxes



- Highlights:**
- Our wide, tailor-made range of Multi-Safe disposal boxes corresponds to the current ISO 23907-1:2019 on the prevention of needle stick injuries.
 - With our extensive product range of Multi-Safe boxes we are able to meet any disposal need in the field of medicine and laboratory.
 - With the various options, from the convenient 200 ml format to the autoclavable 60 l disposal box for clinical waste, we offer an optimal solution for every need.

Saliva Collection

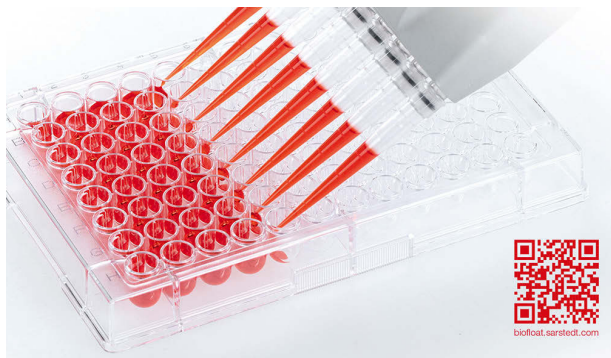
SARSTEDT – COVID-19 virus diagnostics products



- Highlights:**
- Validated containers for saliva collection for virus diagnostics: Monovette® VD, V-Monovette® VD and Salivette® VD.
 - Saliva testing has become particularly important and is ideal for screening for SARS-CoV-2. Saliva collection using gargling and /or the Salivette® offers the key advantage that the user can collect the saliva themselves under supervision.
 - Both the gargling and the Salivette® saliva collection methods are a more pleasant experience for the patient than the commonly used nose and throat swab method.
 - The sample collected can be transported to the laboratory securely sealed in a secondary container.
 - Acute infections can be directly detected using the molecular biological PCR method. There are also rapid tests that use saliva as the sample material.

Pipette Tips

SARSTEDT – BIOFLOAT™ cell culture plates



- Highlights:**
- BIOFLOAT™ cell culture plates
The novel SARSTEDT cell culture plates with highly anti-adhesive BIOFLOAT™ coating are ideally suited for easy, reproducible cultivation of particularly uniform, round spheroids (3D cell cultures).
- Rounder: New, highly anti-adhesive surface coating for easy cultivation
 - Faster: Uniform spheroids have been shown to form more rapidly than on most anti-adhesive, cell-repellent surfaces
 - More reliable: Evenly round spheroids – usually one per well (>95%) – ensure a high reproducibility of your results

Pipette Tips

SARSTEDT – Low Retention Pipette Tips



- Highlights:**
- Minimising sample loss
 - Optimised surface for enhanced dispensing behavior
 - Improved sample recovery
 - Minimal sample loss of highly viscous liquids or samples containing detergents
 - Cost savings in valuable reagents

Other Applications

Pipette Tips

SARSTEDT – Refill Revolution



Highlights:

ONE SYSTEM – FOUR OPTIONS

For over 45 years, we have been manufacturing tailor-made pipette tips. Based on this experience as well as our technical competence and using ultra-modern production methods, we have developed a revolutionary re-filling system for you. Suited to your applications and workflow. Robust and resource-sparing. Safe and reliable.

Pipette Tips

SARSTEDT – Sarpette® M



Highlights:

Finally: Tips AND pipettes from SARSTEDT
SARSTEDT introduces next-generation pipetting with the new Sarpette® M. The Sarpette® M manual piston pipette is designed for comfort, with its uniquely placed ejection button allowing for a particularly ergonomic workflow. With its user-friendly design, precise handling, and lightweight, durable construction, the Sarpette® M sets the benchmark in microliter pipettes – and is also compatible with a wide range of pipette tips.

The Sarpette® M pipette is a perfect fit for any lab with its outstanding performance at a very attractive price and is available for immediately delivery. Try it now.

Centrifuges

Hettich – Mikro 220 | 220 R

Dimensions:

330 × 420 × 313 mm (w × h × d)

Weight:

21 kg / 42 kg

Rotational frequency:

18,000 min⁻¹

Relative centrifugal force:

31,514



Highlights:

- Compact, high-performance microlitre centrifuge
- Choice of seven rotors
- IvD-conform according to directive 98/79/EC
- Impulse key for short cycle mode
- Nine program memories for more individuality
- Nine individual acceleration and deceleration stages
- Model 220 R coolable from -20 to +40 °C with pre-cooling function
- Max. number of tubes: 60 × 2.0 ml

Centrifuges

Hettich – Universal 320 | 320 R

Dimensions:

401 × 529 × 346 mm (w × h × d)

Weight:

31 kg / 52 kg

Rotational frequency:

16,000 min⁻¹

Relative centrifugal force:

24,900



Highlights:

- The universal choice among the benchtop centrifuges
- Choice of 18 rotors
- IvD-conform according to directive 98/79/EC
- Impulse button for short centrifugation
- Impulse key for short cycle mode
- Nine program memories
- Nine individual acceleration and ten deceleration stages
- Model 320 R coolable from -20 to +40 °C with pre-cooling function
- Max. number of tubes: 4 × 200 ml / 6 × 94 ml

Centrifuges

Hettich – Rotina 420 | 420 R

Dimensions:
506 × 650 × 423 mm (w × h × d)

Weight:
75 kg / 108 kg

Rotational frequency:
15,000 min⁻¹

Relative centrifugal force:
24,400



- Highlights:**
- High-performance with first-class equipment
 - Choice of five rotors
 - IVD-conform according to directive 98/79/EC
 - Max. noise level of 51 dB(A) with rotor 4790-A
 - 98 program memories for more individuality
 - Nine individual acceleration and deceleration stages
 - Model 420 R coolable from -20 to +40 °C with pre-cooling function
 - Max. number of tubes: 4 × 600 ml

Centrifuges

SARSTEDT – SC 2700 Centrifuge



Highlights:

- Centrifugation at up to 2,700 x g with swing-out rotor
- Easy operation with pre-installed programs
- Variable program for individual settings is available
- High quality and quiet

The SC 2700 centrifuge has been specially designed for use in physician's consultancies or small laboratory units and can be used with all standard samples tubes.

Intuitive operation to centrifuge the most common types of sample materials at the push of a button is guaranteed by pre-set programs for blood and urine.

The settings tailored to the specific sample materials of blood and urine make it virtually impossible to operate the centrifuge incorrectly.

Incubators

Hettich – HettCube 600 R

Dimensions:
710 × 825 × 1990 mm (w × h × d)

Weight:
175 kg

Temperature range:
0 °C to +65 °C

Internal volume:
520 l

Energy consumption at 37°:
0.056 kWh/h



- Highlights:**
- Only 0.6 m² footprint
 - Up to 67 percent of usable volume
 - Fast and easy access, one-hand operation door
 - Perfect conditions with unique temperature regulation
 - Real-time calendar
 - Week programming with holiday function
 - Flexible alarm settings
 - Wide range of program functions (Start after time, start after temperature etc.)
 - Up to four shelves included in standard
 - Automatic door closure with magnetic seals
 - Low noise level of ≤ 44 dB(A)










Specialties

SARSTEDT – Cell Culture Products






- Highlights:**
- For over 25 years SARSTEDT has produced a wide range of high quality cell culture products which are distributed worldwide. These many years of experience and knowledge of the needs of users have allowed us to optimise and continually expand the product range.

Companies & Suppliers

	Sample Processing	Automation	Chemistry & Immunochemistry	Hematology	Pathology	DNA	Microbiology	POCT	Information Technology	Other Applications
<p>Beckman Coulter Diagnostics 22, Rue Juste-Olivier 1260, Nyon, Switzerland phone: +41 22 365 38 08 EUPublicRelations@beckman.com www.beckmancoulter.com</p> 	■	■	■	■			■	■	■	
<p>Clinisys Deutschland GmbH Am Klingenberg 6 65396 Walluf, Germany phone: +49 6123 7016-222 info-de@clinisys.com www.clinisys.com</p>  <p>Enabling healthier communities</p>					■				■	
<p>ELITechGroup B.V. Van Rensselaerweg 4 6956 Spankeren, The Netherlands phone: +31 313 430 500 sales.ecsnl@elitechgroup.com www.elitechgroup.com</p>  <p>EMPOWERING IVD</p>			■							
<p>Andreas Hettich GmbH & Co. KG Föhrenstraße 12 78532 Tuttlingen, Germany phone: +49 7461 705-0 info@hettichlab.com www.hettichlab.com</p> 										■
<p>Mesalvo GmbH Heinrich-von-Stephan-Str. 25 79100 Freiburg, Germany phone: +49 761 2928 99-0 info@mesalvo.com www.mesalvo.com</p>  <p>real-life applications</p>								■		
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<p>Nova Biomedical 200 Prospect Street Waltham, MA 02454-9141, USA phone: +1 781 894-0800 info@novabio.com www.novabiomedical.com</p> 								■		
<p>Promega GmbH Gutenbergring 10 69190 Walldorf, Germany phone: +49 6227 6906-129 martin.rossmanith@promega.com www.promega.com</p> 						■				
<p>RANDOX 55 Diamond Road Crumlin, County Antrim, BT29 4QY, UK marketing@randox.com www.randox.com</p> 			■							

Companies & Suppliers

	Sample Processing	Automation	Chemistry & Immunochemistry	Hematology	Pathology	DNA	Microbiology	POCT	Information Technology	Other Applications
<p>Sakura Finetek Europe Flemingweg 10a 2408AV Alphen aan den Rijn, The Netherlands phone: +31 88 592 00 00 info@sakura.com www.sakura.com</p> 										
<p>SARSTEDT AG & Co. KG Sarstedtstraße 1 51588 Nümbrecht, Germany phone: +49 2293 305-0 info@sarstedt.com www.sarstedt.com www.tempus600.com</p> 	■		■	■	■	■		■		■
<p>T&O LabSystems GmbH & Co. KG Leibnizstraße 7 24568 Kaltenkirchen, Germany phone: +49 4191 9913883 info@to-labsystems.com www.to-labsystems.com</p> 	■									

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Mediengruppe Oberfranken

Dxi 9000

ACCESS IMMUNOASSAY ANALYZER

It's Time to Reimagine What's Possible

Your busy lab needs next-level innovation to help you meet your growing demands.
That's why we developed an analyzer that redefines what you can achieve.



- Anaemia
- Adrenal / Pituitary
- Bone Metabolism
- Cardiovascular
- Diabetes
- Infectious Diseases
- Prostate Health
- Reproductive Health
- Sepsis / Inflammation
- Thyroid
- Tumour Markers



ZeroDaily Maintenance



PrecisionVision Technology



SimpleSolve Onboard Guide



Create time to focus on what matters most

