

Next Generation Pathology

Robotics, NGS and Expansive Panel Diagnostics

Equinox Medical provides a wide panel of **qPCR platforms** and a comprehensive range of specialized reagents for the **clinical, food and water industries**.

This diagnostic capability is advanced by Next-Generation Sequencing (NGS) reagent panels. **Robotic liquid handling** and a broad range of **nucleic acid extraction** systems ensures expedient, accurate and efficient test results.



Our Partners for Pathology Solutions

We provide end-to-end pathology solutions with a broad coverage of qPCR through our partnerships

	Liquid Handling	Extraction	PCR	NGS	Preventative Maintenance
Equipment		 			
Reagents			3B BlackBio Dx Ltd. 		



Our Customer Partners for Pathology Solutions

We deliver extraction, PCR and robotic solutions for major Australian pathology customers



02

Liquid Handling and Workflow Automation



Sample Transfer Processing Systems

MGI have introduced a broader range to ensure fit-for-purpose and flexibility

Main Features

- 96 – 192 samples per 40 min.
- 2µL - 1,000µL volume range
- Capable of decapping, recapping, barcode identification, automated liquid transfer, HEPA-filtration and negative pressure protection adaptable to microplates as well as reservoirs and tubes.
- can integrate different functional modules with PCR systems, magnetic rack, temperature control module

Parameters	MGISTP-7000	MGISTP-3000
Dimensions	1,470mm(W)x960(D)x2,100(H)	1,110mm(W)x680(D)x1,050(H)
Functions	Integrated multiple functions including decapping, recapping, barcode identification, automated liquid transfer, HEPA-filtration and negative pressure protection,	
Throughput	192 samples/40 min.	96 samples/40 min.
Volume Range	2µL - 1,000µL	10µL - 1,000µL
CV	10µL: < 5%; 100µL: < 2%; 1,000µL: < 1%	10µL: < 5%; 100µL: < 2%; 1,000µL: < 1%
Accuracy	10µL: < +/- 10%; 100µL: < +/- 5%; 1,000µL: < +/- 2%	10µL: < +/- 10%; 100µL: < +/- 5%; 1,000µL: < +/- 2%
Barcode Scanner	4 scanner sensor, Barcodes types supported: 1D and 2D	1 scanner sensor, Barcodes types supported: 1D and 2D
Protection	ISOS, HEPA 99.995% at 0.3µm, Negative Pressure System; UV light 36W	ISOS, HEPA 99.995% at 0.3µm, Negative Pressure System; UV light 3x8W
Applications	All viral tests, pathology labs, bio-banks	Labs which have lower throughput sample processing

High-throughput MGISTP-7000



192 samples/40min
Useful for Amies
Tubes and is being
used in SNP

Medium-throughput MGISTP-3000



96 samples/40min

Sample Transfer Processing Systems

MGI systems cater for all sample types and collection tubes including complex Amies tubes



MGIEASY Stool Collection Kit

Fully automated stool processing is provided through the MGI stool kit and the STP-7000



Feature



Reduce the data bias result from microorganism growth and nucleic acid degradation



Support for room temperature storage, reduce the shipping cost



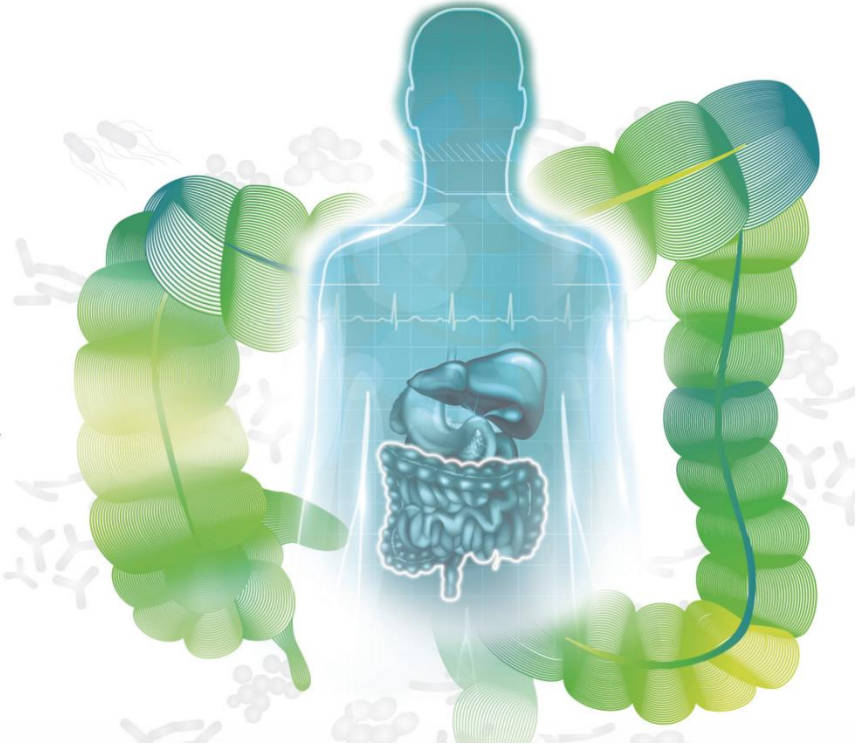
Protect the sample even under turbulent transportation



Support for sample tracking with barcode



Applicable for 16S rDNA, WGS, qPCR



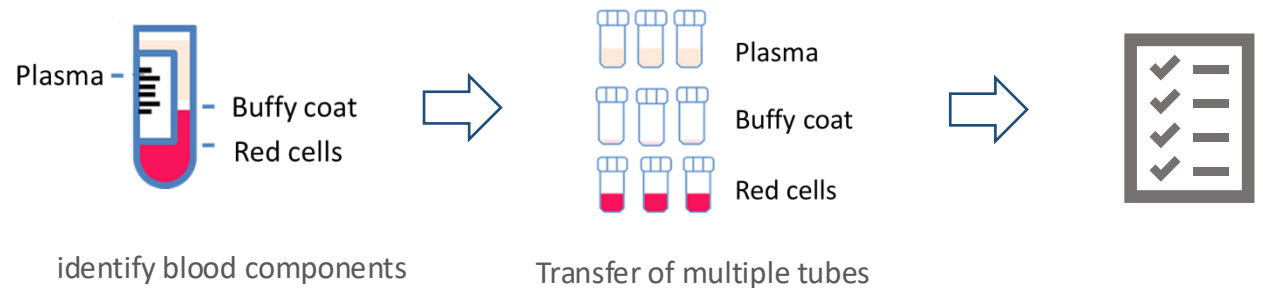
Blood Sample Transfer Processing System STP-B1000

Automated blood component transfer is provided through the STP-B1000 liquid handler for buffy coat and red cells

Precisely identify and efficiently transfer blood components

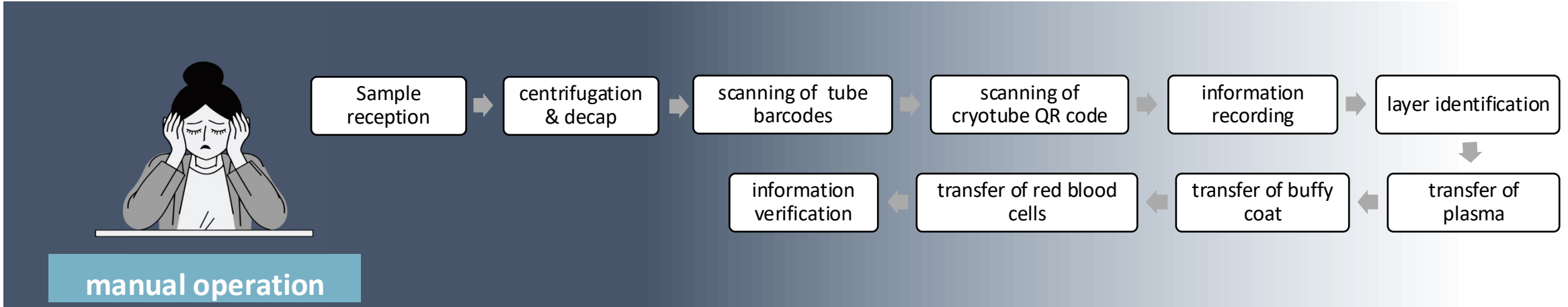


The STP-B1000 can precisely identify and automatically transfer blood components in centrifuged blood collection tubes, including plasma, the buffy coat, and red blood cells. Additionally, it can automatically complete information traceability management to prevent information mismatch.



Highly efficient, with a 3-fold increase in efficiency

■ Enormous manual work



✓ Tedious and repetitive tasks are all handled by STP-B1000



196 samples ~ 100min

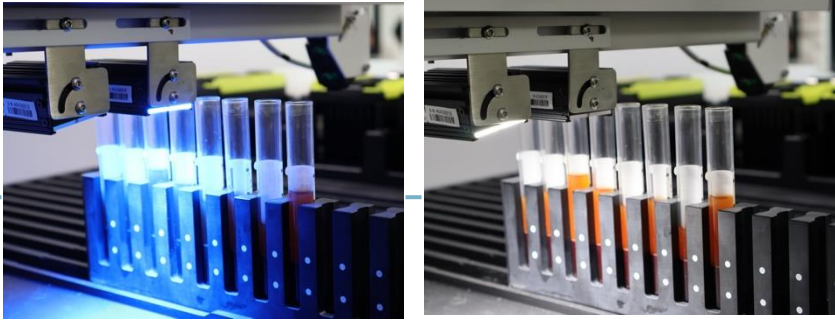


Efficiency improvement

1 STP-B1000 ≥ 3 people



STP-B1000 : Dual-light shooting, accurate layer recognition



blue & white light, high-precision recognition

Enhances contrast:

Blue light can significantly improve the contrast between different blood components, and the layered interface positioning is more accurate

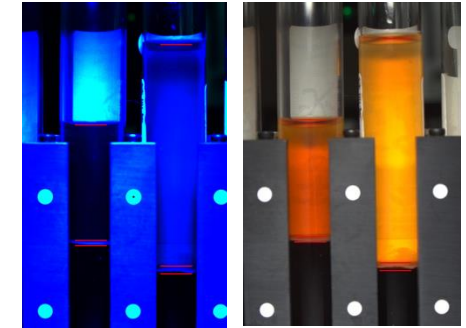
Reduce background distractions:

Blue light can effectively reduce background interference and improve recognition clarity

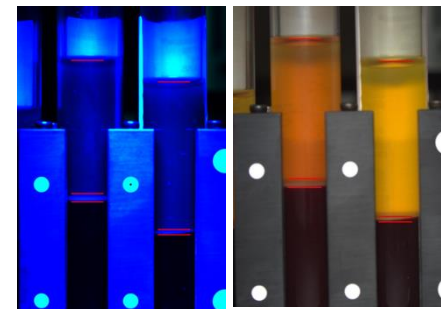
Blue & white light work together:

The combination provides double protection and improves recognition accuracy

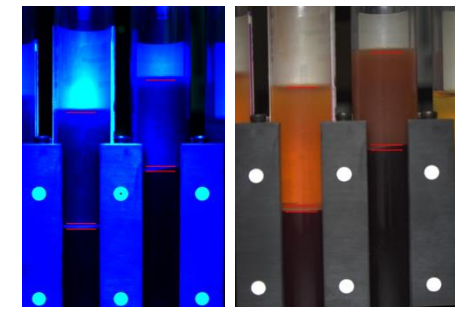
A variety of complex blood samples can be stably and accurately identified



Hemolysis



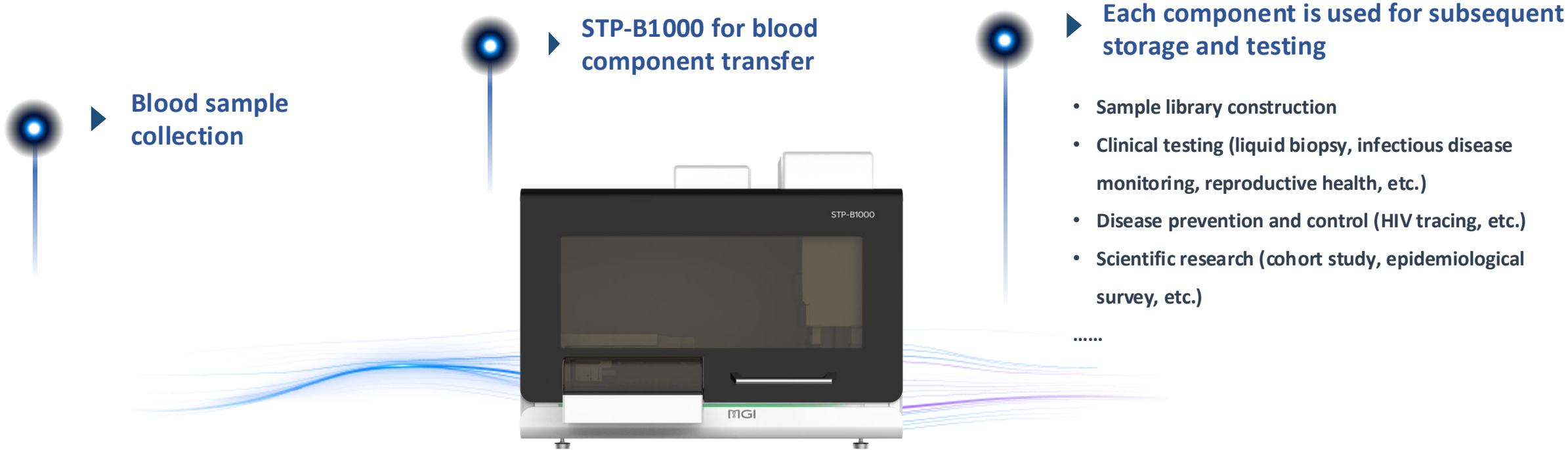
Jaundice



Lipemia

Applications

Clinical testing, disease prevention and control, scientific research and sample library construction



STP-B1000, the best companion for laboratory blood sample pre-processing!

 Single-person efficiency increased by 3 times

 The recovery rate of the buffy coat is stable and reaches more than 90%

 Completely prevent information mismatch

 Daily throughput: 1 sample -> 768 samples (8 hours)



Automated Liquid Handler: Alphatool

The Alphatool provides high speed 96-well plate robotics with a small footprint (0.36m²) and open platform

Main Features :

- Speed – 22 sec for 96 well plate
- Overall dimensions (L * W * H): 620 x 600 x 700 mm.
- Weight: 36 Kg
- Cost-effectiveness
- Pipetting range 1uL – 1,000uL
- Offers range of liquid handling functions:
 - pipetting,
 - dispensing,
 - aliquoting,
 - mixing,
 - gradient dilution, and
 - reagent preparation.



Rapid pipetting

It can fill a 96-well plate in as fast as 22 seconds, equipped with both single-channel and 8-channel pipettes, meeting precise pipetting needs ranging from 1 to 1000 μ L.



Flexible configuration

12 plate positions, modular hardware, flexible and customizable tabletop



User friendly

The visual interface is simple and easy to understand. One-click to complete a variety of complex experimental processes via the customized script editing.



High compatibility

Compatible with many reagents and consumables on the market and compatible with standard SBS utensils. Standard API interface that supports being integrated as a unit of work.



03

Automated Nucleic Acid Extraction Systems



Exclusive Distribution of Compact Extraction Systems

Equinox provides flexibility to choose the best-fit for purpose between 3DMed and Four E's systems



MultiEx16



MultiEx32

Pre-filled DNA/RNA Isolation kits for use on Four E's and 3DMed Extraction Systems



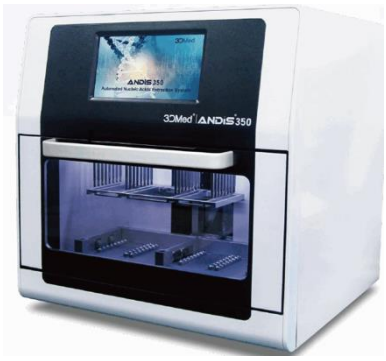
ANDiS 360



MultiEx96



MultiEx96P



ANDiS 350



Four E's 32 Sample Nucleic Acid Extraction System – EX32

Deployed by our customers due to contamination risk reduction, fast TAT and broad capability



MultiEX32



Sliding plate tray avoids spillage

Four E's Scientific EX32 System Specifications

Sample types	Serum, Plasma, Saliva, and other body fluids
Reaction Volume	50µl-1000µl
Sample Throughput	1-32
Magnetic beads recovery rate	96%
Extraction variation	CV < 3%
Heating temperature	Adjustable from room temperature to 125°C/257°F
Reagent type	Magnetic bead-based open-source reagents
Extraction time	20min-40min/run (depending on reagent types and volumes)
Well plate	96 deep well plate
Mixing Intensities	Adjustable : 8 Levels
Max. Stirring Speed	10Hz
Display	10-inch Colour touch screen
Memory	>500 programs
Program management	Add, edit, and delete programs
UV lamp	Yes
Light	Yes
Device size	349x 325x 390(mm)
Device weight	25kg



Four E's New 96 Sample Nucleic Acid Extraction System –EX96P

Our 96 well plate system provides a fast heat ramp-up, low footprint and high output



MultiEX96P



Four E's EX96P System Specifications

Sample types	Serum, Plasma, Saliva, and other body fluids
Reaction Volume	50µl-1000µl
Sample Throughput	96
Magnetic beads recovery rate	96%
Extraction variation	CV<5%
Heating temperature	Adjustable from room temperature to 125°C/257°F
Reagent type	Magnetic bead-based open-source reagents
Extraction time	20min-40min/run (depending on reagent types and volumes)
Well plate	96 deep well plate (x 6)
Mixing Intensities	Adjustable : 8 Levels
Max. Stirring Speed	10Hz
Display	10-inch colour touch screen
Memory	>500 programs
Program management	Add, edit, and delete programs
UV lamp	Yes
Light	Yes
Device size	349mm x 460mm x 390mm
Device weight	35kgs



Additional Features EX32/EX96

Our customers find the Four E's user interface touch screens more intuitive and sensitive than our competitors

MultiEX32 Nucleic Acid Extractor



Key Features:

- 32 samples per run
- 10-inch high-sensitivity touchscreen
- System Check Feature
- Plate drawer
- Audible alarm
- Reliable motor > 1,600,000 tests
- 349x 325x 390mm (wxdxh)

MultiEX96P Nucleic Acid Extractor



Key Features:

- 96 samples per run
- 10-inch Intuitive UI & sensitive touchscreen
- Self-diagnostic system checks
- Improved compact design
- Audible alarm
- Rapid heat -up to 100°C in one min
- 349 x 460 x 390mm (wxdxh)

MultiEX16 Nucleic Acid Extractor is similar in function and capabilities with a sample throughput of 16 samples



Introducing the VortEX Large Volume Nucleic Acid Extractor

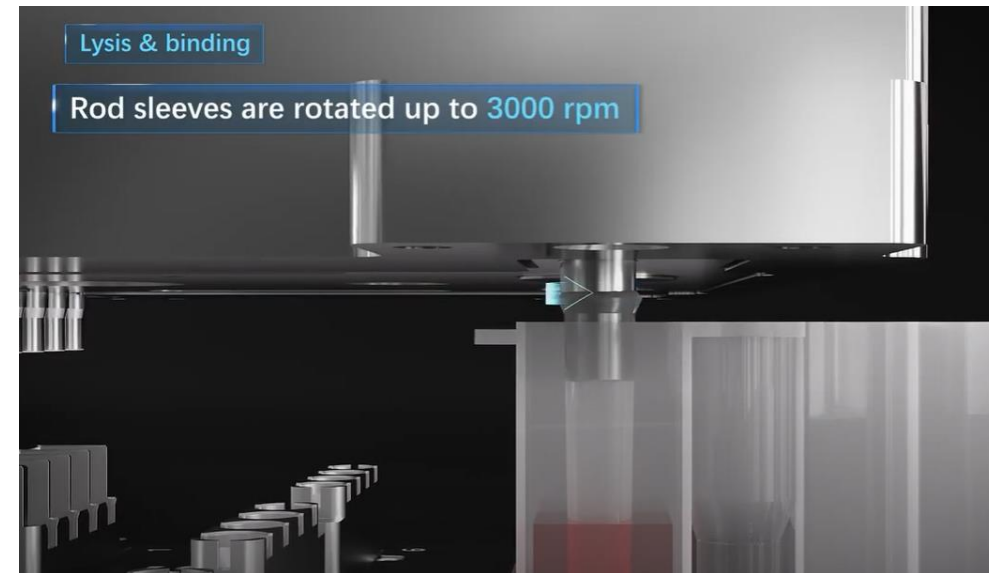
Latest innovation from Four E's Scientific provides vortex mixing for extraction mainly for cfDNA extraction



VORTEX24

Key Features:

- Powerful oscillation vortex mixing technology
- 1-24 samples in a single run
- Ideal for cfDNA extraction
- Processing volume up to 8mL
- Final elution volumes as low as 50uL
- High suitability also for the food and water industries



Introducing the MGISP-NEX: Not Only Extraction System

The NEX system delivers high throughput extraction and liquid handling automation in one platform

MGISP-NEX equips with an independent 8-channel pipetting module and magnetic rod extraction module. The magnetic rod extraction module has 24 magnetic rod heads and 96 magnetic rod heads, which can be flexibly interchanged. It is multi-purpose in one machine, and flexibly equipped with a variety of extraction kits, Therefore, it can meet the requirements of different application scenarios.



Preparation of consumables



Barcode Identification



Sample Transfer



Nucleic Acid Extraction



PCR Mix Preparation



PCR & Library Prep

Whole process extraction

Flexible Pipetting

The independent 8-channel pipetting can perform liquid transferring, which reduces manual intervention and achieves a higher degree of automation.

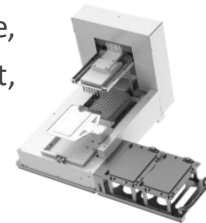
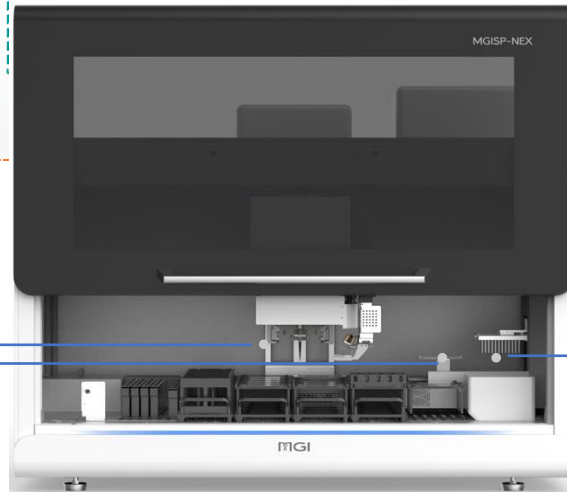


Critical contamination control

Equipped with UV system, HEPA and shield plate, effectively ensure the safety of the experiment, reduce cross-contamination.

Efficient extraction

The 24 and 96 magnetic rod heads are interchangeable, and the processing volume is 20µL-5000 µL



Applications of MGISP- NEX

The NEX system provides a wide range of applications for large volume and small volume sample types

Oncology field

Liquid biopsy for Lung Cancer
Colorectal cancer screening
...

Infectious field

Respiratory pathogen testing
HBV, HCV, HIV testing
HPV screening
...

Reproductive health research

NIPT
Thalassemia screening
Deafness screening
...

More fields

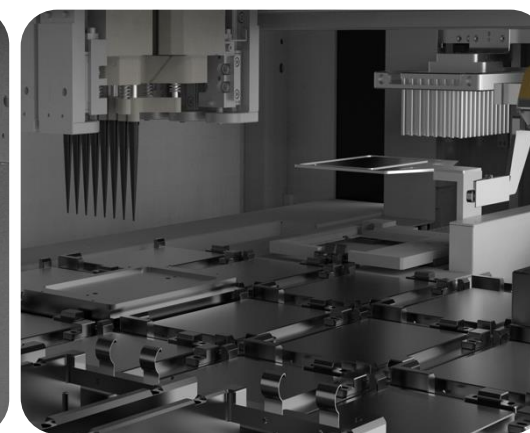
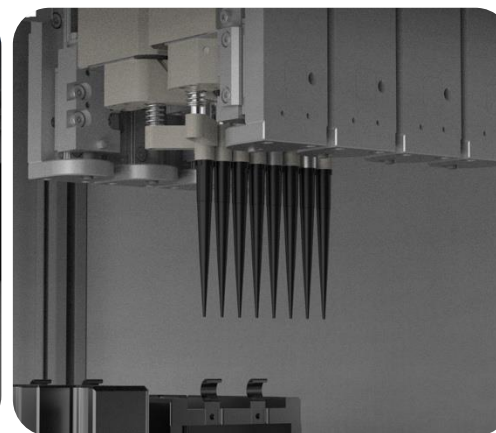
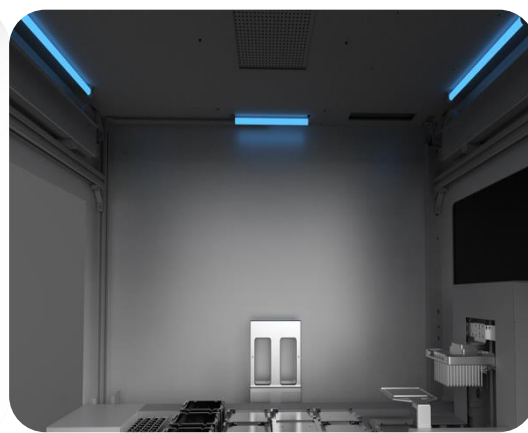
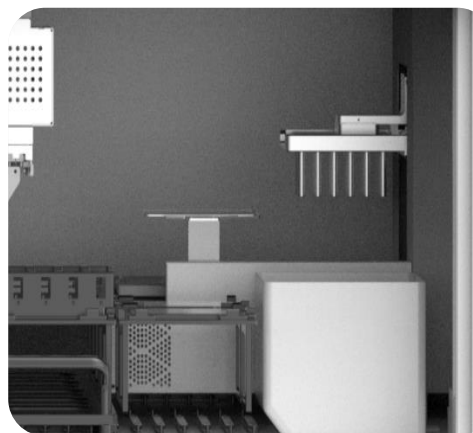
Animal breeding
Plant breeding
...

The replaceable 24 magnetic rod head is suitable for the extraction of large volume samples

The triple contamination control solutions design reduces cross-contamination

Independent 8-channel pipetting satisfies Pooling, homogenization and other special operations

Whole process automation, open platform



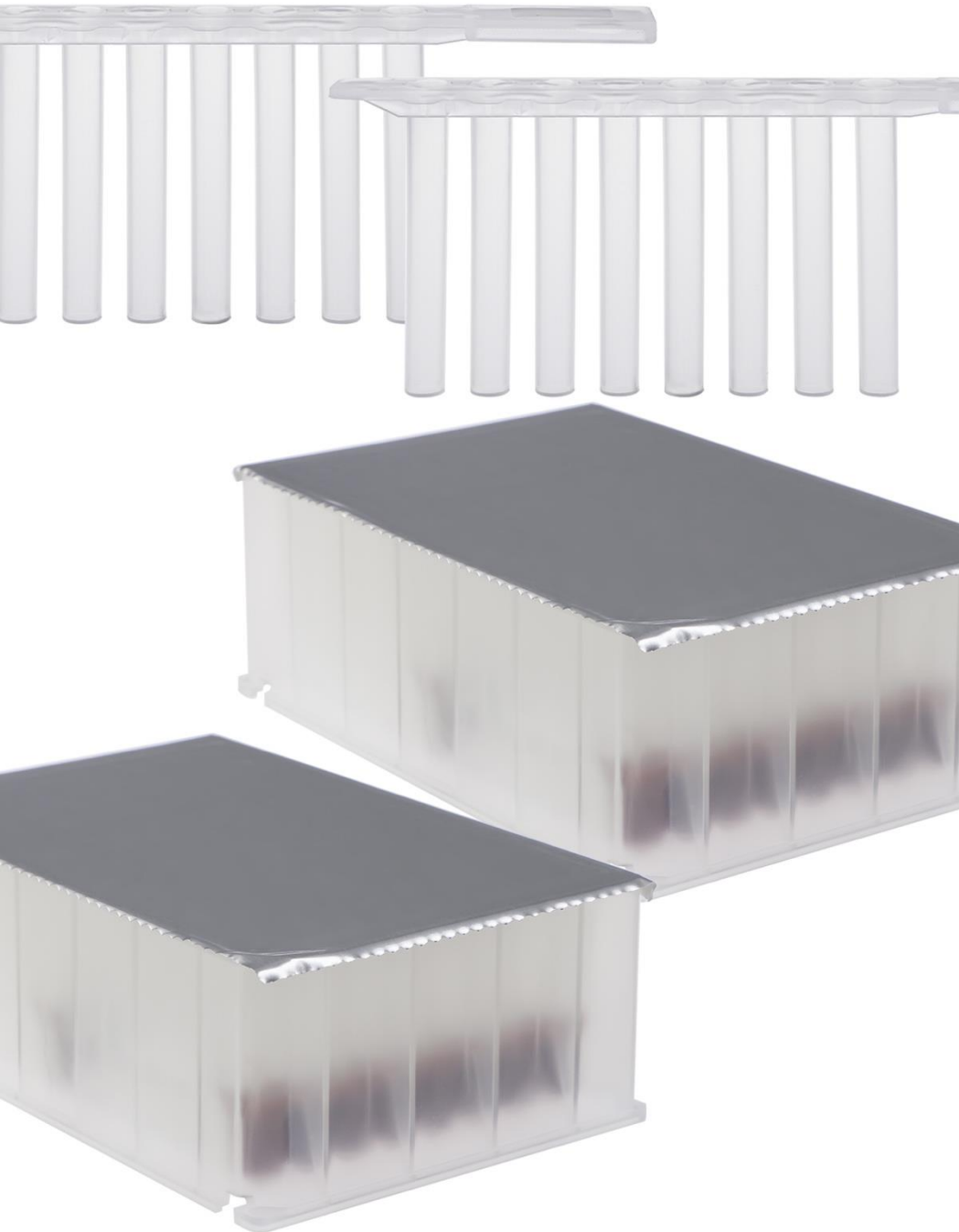
High Throughput Extraction Systems from MGI

Our partner, MGI, provides a 384 sample solution with a wide processing volume range (20-1,000 μ L)

MGISP-NE384



MGISP-NE384	
Capacity	384 samples
Processing Volume	20 μ L~1000 μ L
Working Position	4x6 96-well plate working position
Temperature Control, Lysis/Elution Well	From +5°C above ambient temperature to 115°C
Temperature Precision	$\leq \pm 1^\circ\text{C}$
Mixing Module	Z axis independent control, 1~4 modules running choice
UV Lamp	More than 100,000 $\mu\text{W}\cdot\text{s}/\text{cm}^2$
HEPA Filtration System	99.99% at 3 μm
Operating Interface	23-inch built-in touch screen, Windows software



04

Pre-filled RNA & DNA Extraction Kits

Faecal & Pathogen Extraction from Four E's

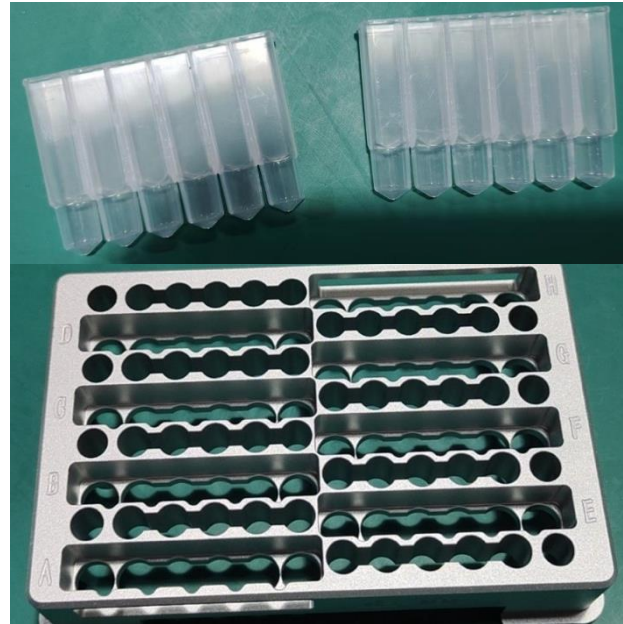
The 4E's prefilled faecal and pathogen extraction kits have fast runtimes and are cost-effective

Key Features:

- Throughput maximum : 1-192 sample/day
- Run time of less than 30 mins
- Automation solution for 200µL-10 ml samples;
- High extraction: > 2µg from 200mg samples;
- No toxic solvent: such as no phenol and chloroform, High Stability.
- Prefilled Single Sample or multiple-sample deep Well Plates available



Prefilled 16 sample plates



Prefilled single sample plates






Compatible with **Four E's**
Nucleic Acid Extractors



Broad Extraction Reagent Offering

Four E's offer a comprehensive and cost-effective extraction range

The table below outlines the appropriate kits to be used depending on desired extraction targets :-

Extraction Kit Type	4Es Sample Types	TGA approved	Protocol Run Time	Application Examples
Viral DNA/RNA	Plasma, Serum, Urine, CSF, Amniotic Fluid, Tissue, Nasopharyngeal, Oropharyngeal Swabs, Saliva		10 mins	Viral Respiratory Panels and other Infectious Diseases such as HIV, HPV, HBV, HCV.
Pathogen	Blood, Sputum, Bronchoalveolar Lavage, Cerebrospinal Fluid		46 mins	Atypical Respiratory Panels, STD Panels, MRSA, and HSV.
Genomic DNA (gDNA)	Saliva and Fresh or Frozen Whole Blood in EDTA		39 mins	Haematological Malignancies, Dengue, Malaria and HLA B27.
Tissue DNA (FFPE)	FFPE Biological Specimens		39 mins	Solid Tumour Oncology Testing for Somatic Cancers
Faecal	Fresh or Frozen Stool Samples		26 mins	GI infections and Gut Microbiome analysis



05

Real Time Quantitative PCR System & Reagents

Four E's 6 channel PCR System – Q96

Four E's qPCR system provides 6 fluorescence channels with fast heating ramp-up rate



Q96 PCR System



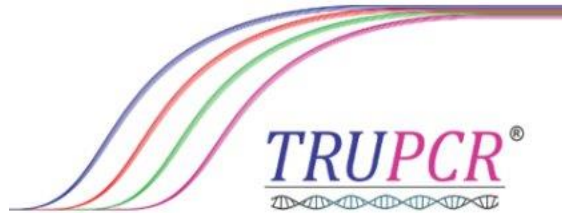
Four E's Q96 qPCR System Specifications	
Throughput	96 Well (12x8)
Dynamic Range	1-10
Detection Location	Top Detection
Excitation light wavelength	400-800nm
Detection Wavelength	500-800nm
Fluorescence Channels	Channel 1: FAM/SYBR Green I Channel 2: JOE/HEX/TET/VIC Channel 3: NED/TAMRA/Cy3 Channel 4: ROX/Texas Red Channel 5: Cy5 Channel 6: Cy5.5
Excitation light source	Full-spectrum LED
Detector	Polymerase Modulator on Temperature (PMT)
Block Temperature Range	4~105°C
Sample Volume Range	5-100µL
Max block heating & cooling rate	≥6°C/s
Heated Lid Temperature Range	30°C-110°C (default 105°C)
Gradient Temperature Difference	1-40°C
Fluorescence intensity	CV≤3%
Display	10.1-inch touch screen
Scan mode	Full plate scan or specified line scan
Sample tray control mode	Sample tray automatically moves in/out, enabling integration with automated workstations/plate handlers.
Software functions	Absolute quantification, Relative quantification, Melting curve, SNP genotyping, HRM, Quick run, etc.
Operating system	Built in PC Software (Windows 8 or Higher)
Ports	USB Type-A port × 2, USB Type-B port, RJ45 port
Power-off protection function	Yes, Data will be restored after power resumes
Dimensions	320mm (W) × 525mm (D) × 420mm (H)
Extension ports	2 USB ports, 1 Ethernet port
Weight	27Kg

6 Channel system with fast heating ramp up rate of 6°C/s that reduces processing times



Expanding Our Range with New Exclusive Partnerships

3B BlackBio are an Indo-Spanish PCR Specialist with global success including Sonic UK and 4Cyte



ISO 13485:2016 & GMP Compliant manufacturing under the Medical Device QMS through BSI



Licensed by CDSCO, Govt. Of India; equivalent to FDA, for our top-selling parameters in India



Over 120 Parameters are CE-IVD marked

3B BlackBio Dx Limited is a leading PCR-based Molecular Diagnostic Kits company with the following history & attributes :-

- Founded in 2011 as an Indo-Spanish JV
- It is ISO 13485:2016 certified and GMP compliant,
- It has achieved widespread acceptance in over 45 countries spanning the UK, Europe, the Middle East, APAC, PATAM and North America (incl. United States & Canada)



3B BlackBio's independent Validation from Sonic UK

The BCR-ABL1 dPCR panel has been validated by Sonic UK



- 3B BlackBio is providing several qPCR kits to Sonic UK such as the
 - o BCR-ABL1 Transcript Screening Kit
 - o Acute Leukaemia Panel
 - o Paediatric Leukaemia Panel
- Recently launched the BCR-ABL1 dPCR kit with extensive validation by Sonic UK

The TRUPCR® dPCR BCR::ABL1 kit (RUO) is intended for the quantitative detection of the BCR::ABL1 Major fusion gene transcript in bone marrow or peripheral blood samples of chronic myeloid leukaemia (CML)



We are very excited to introduce our latest innovation - the BCR::ABL1 Major dPCR kit, the first kit in our TRUdPCR range 🚀 ⭐

We're grateful to our partners at **Sonic Healthcare Health Services Laboratories** for their support and clinical validation data 🙌

Our ultra sensitive and extensively clinically validated test is compatible with multiple platforms, it is simple and easy to use.

Contact us now to streamline your BCR::ABL testing and sign up for a demo kit.

For more information, visit: www.trupcr.com

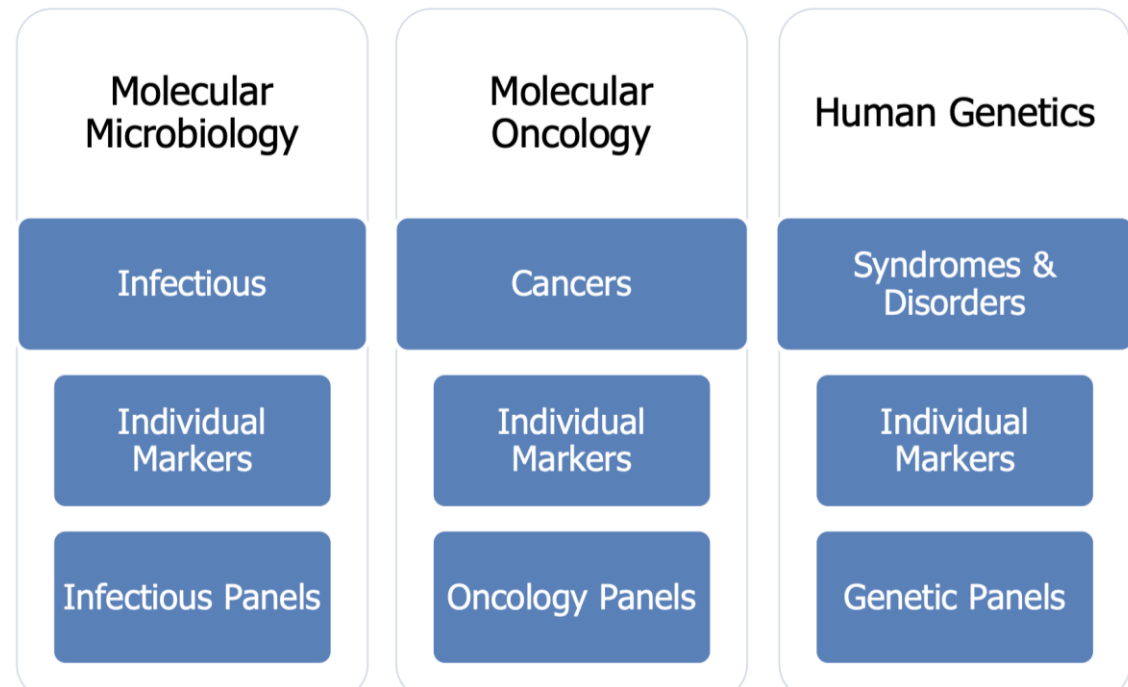


3B BlackBio's Broad PCR Kit Range

Over 120 CE-IVD certified kits available including comprehensive cancer panels including leukemia

Including :-

- Comprehensive leukaemia panels
- MRSA detection kits
- Coagulation panels
- Solid tumour panels – lung, colorectal, and melanoma
- Respiratory pathogen panels (31 targets) incl. Atypicals



3B BlackBio's Broad PCR Kit Range

3B Blackbio panels provide a wide range of markers and targets

ONCOLOGY PANELS

Haemato-Oncology & Blood Disorders

- [Acute Leukemia Panel Kit \(18 Markers\)](#)
- [ALL Panel Kit \(8 Markers\)](#)
- [AML Panel Kit \(10 Markers\)](#)
- [Leukemia Fusion Panel Kit \(14 Markers\)](#)
- [MPN Panel Kit \(4 Markers\)](#)
- [Pediatric Leukemia Panel Kit \(18 Markers\)](#)
- [Coagulation Panel \(4 markers\)](#)

Solid Tumors

- Colorectal Cancer Mutations Panel Kit (53 Mutations)
- Lung Cancer Mutations Panel Kit (72 Mutations & 29 Fusions)
- Melanoma Mutations Panel Kit (32 Mutations)

INFECTIOUS DISEASES PANELS

- COVID-19 & Flu Panel Kit (6 Targets)
- Flu Panel with RSV Detection Kit (5 Targets)
- Gastrointestinal Panel I Kit - (4 Targets)
- Influenza Panel Kit (4 Targets)
- Meningitis Panel Kit - Viral & Bacterial (21 Targets)
- Neuro Panel Kit (11 Targets)
- Respiratory Pathogen Panel Kit - Viral & Bacterial (31 Targets)
- Sepsis AMR Panel Kit (RUO) - (18 Targets)
- STD Panel Kit (9 Targets)
- TORCH Panel Kit (5 Targets)
- Transplant Panel Kit (7 Targets)
- Tropical Fever Panel Kit (8 Targets)
- UTI ID Panel Kit (14 Targets)

ANTIMICROBIAL RESISTANCE PANELS

- AST Panel Kit (14 Targets)
- Carbapenem Resistance Detection Kit
- ESBL & Carbapenem Resistance Detection Kit (RUO)
- ESKAPE ID & AST Panel Kit (RUO) (17 Targets)
- GPP-C ID & Carba-R Panel Kit (RUO) (10 Targets)
- MRSA Detection Kit
- Rifampicin Resistant MTB Detection Kit
- Rifampicin & Isoniazid Resistant MTB Detection Kit
- UTI AST Panel Kit (14 Targets)
- VRE Detection Kit



Equinox Panels currently in use in Australia

We have achieved quick take-up in Australia due to the panel breadth and accuracy

3B BlackBio Viral Respiratory Panel
Viral Targets
Influenza A
Influenza B
RSV
Human ParaInfluenza Virus 1 & 4
Human ParaInfluenza Virus 2 & 3
RV/EV
Human Adenovirus
Human Metapneumovirus
SARS COV2
Additional Viral Targets
Human Coronavirus
Human Parechovirus
Influenza A H3N2
H1 Influenza pdm09
Human Bocavirus
Influenza C
Advantages :
Better differentiation between Targets for eg. In the Ausdiagnostics Panel if RV/EV comes positive Austech cannot distinguish if the positive Target is RV or EV. It is easy to differentiate between RV and EV with 3BBBlackbio.
6 Additional Viral Targets

3B Blackbio Bacterial Pathogen Targets for Respiratory Samples can have application for wound samples as well
Legionella
Bordetella spp.
B.Pertussis
Mycoplasma pneumoniae
Staphylococcus aureus
Streptococcus pneumonia
Klebsiella pneumonia
Salmonella
Streptococcus pyogens
Chlamydia
Streptococcus agalactiae
Acinetobacter baumannii
Pseudomonas aeruginosa
Haemophilus influenza
Moraxella catarrhalis

3B Blackbio Coagulation Panel
Factor V Leiden Mutation
Factor II (Prothrombin) Mutation
MTHFR C677T Mutation
MTHFR A1298C Mutation

BioPoint Bacteria Panels
Cryptosporidium
Giardia



The 3B BlackBio Difference

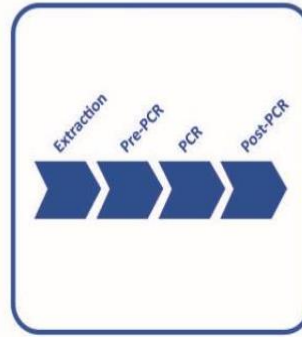
Platform agnostic kits with inbuilt controls to ensure accuracy and reliability



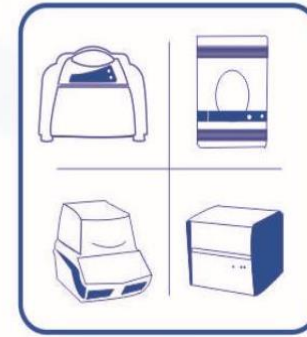
World's largest
CE-IVD kit range



Extensively Validated on a
Wide Variety of Specimens



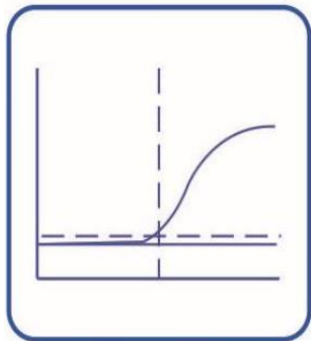
Entire Molecular
Workflow Solutions



Platform Agnostic



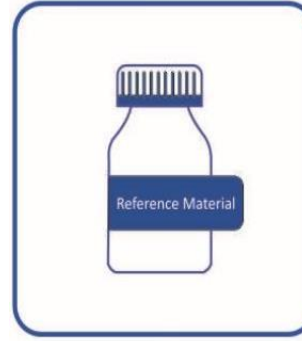
Multiplex Panel And
Singleplex Assays



Reliable Results with
Endogenous Internal Control



Complementary
Software Analysis Tools



Aligned with Certified
Reference Materials



All-inclusive
Kits






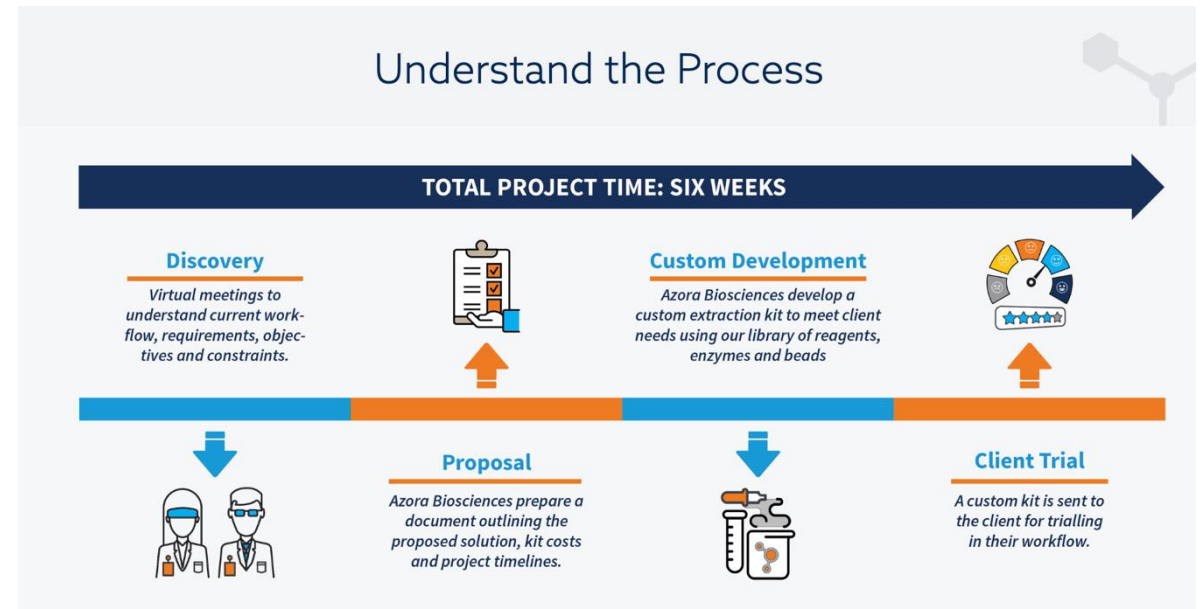
Rapid Turnaround
Time

Lab Developed PCR Assay Support from Azora Biosciences

Azora are specialists in customized products, developed specifically for the needs of individual laboratories

Azora Biosciences develops and manufactures high-performance products in New Zealand. They specialize in customized products, designed specifically for the needs of individual laboratories.

 <p>Prism Probe qPCR Mastermix</p> <p>Prism Probe 4X qPCR Mastermix is optimised for inhibition resistance and sensitivity for robust, reproducible PCR workflows</p>	 <p>Prism Green qPCR Mastermix</p> <p>Prism Green 4X qPCR Mastermix is optimised for inhibition resistance and sensitivity for robust, reproducible PCR workflows</p>	 <p>Prism Probe 1-Step RT-qPCR Mastermix</p> <p>Prism RT-qPCR 4X qPCR One-Step Mastermix is optimised for inhibition resistance and sensitivity for robust, reproducible PCR workflows</p>
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06

NGS Reagents for Infectious Diseases

ABL Diagnostics History & Coverage

ABL Diagnostics has an approx. 10 year history of genetic reagents and analysis based in France

- Equinox has the exclusive distribution rights for ABL Diagnostics, France
- ABL Diagnostics offers innovative and proprietary molecular biology assays and diagnostic data analysis & reporting
- ABL was established in France in 2016
- ABL's products are supplied to over 50 countries
- ABL is listed on the Euronext Paris compartment C stock exchange
- ABL collaborates with major institutes such as the Pasteur Institute
- ABL has been compliant since September 2019 for ISO 13485



Reagents

- DeepChek[®] reagents are used in genotyping and drug resistance detection through DNA sequencing
- UltraGene[®] reagents are used for molecular detection by PCR Tests



Software

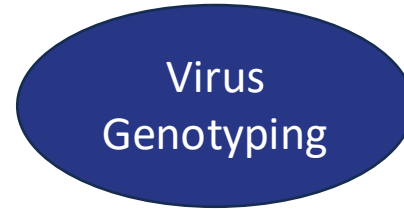
- ViroScore[®], BacterioChek[®], MicrobioChek[®] software is used for diagnostic analysis on sequencing data
- Nadis[®] software for patient data management



Infectious Disease Panels from ABL Diagnostics

ABL have a wide range of sequencing-based panels for infectious disease-causing targets

I. Viral genotyping & drug resistance



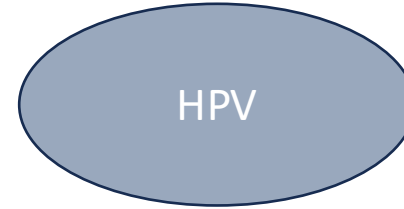
Disease Coverage

HIV, HBV, HCV, HDV, CMV, BKV, HSV and HPV
SARS-CoV-2, Flu A/B, RSV

Unique Value Contribution

- **Only WGS HIV-1 CE-IVD**
- PR+RT+INT regions in single PCR Reaction
- Plasma & proviral DNA sample capability
- HBV WGS helps in liver disease prognosis, Vaccine Escape Assessment and drug resistance

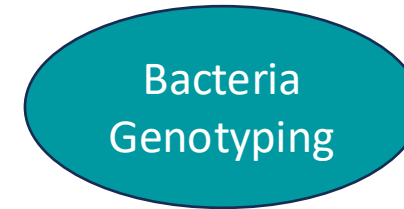
II. HPV genotyping & drug resistance



HPV-1, HPV-2

- **Ability to detect precancerous cervical lesions**
- Covers all high-risk genotypes of HPV

III. Bacteria genotyping & drug resistance



TB, 16s RNA, Salmonella, Campylobacter & Microbiome

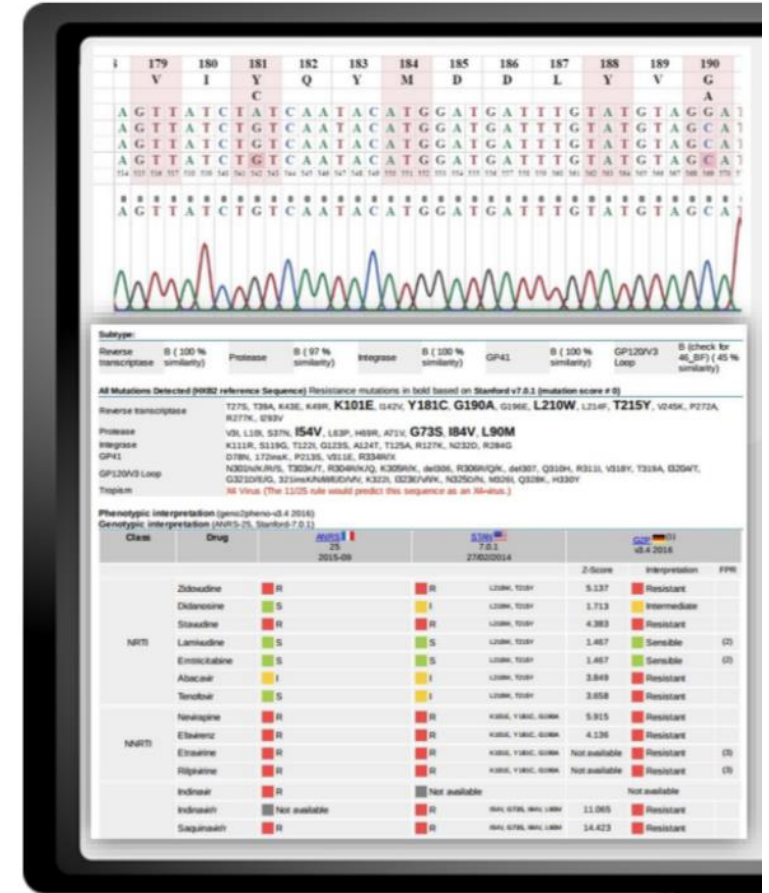
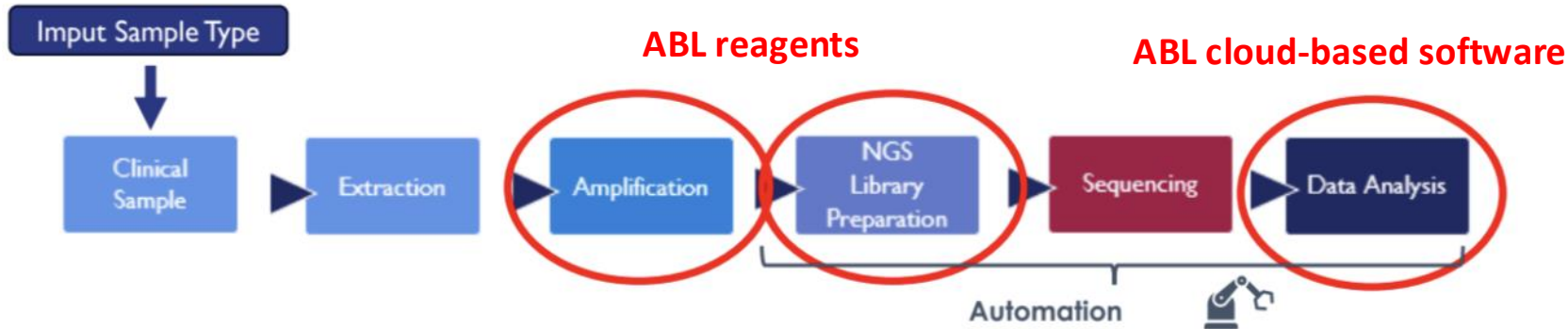
- **V1-V9 coverage for 16sRNA**
- TB culture free technology
- New TB Assay kit in development to target 22 genes as per from WHO



NGS Reagents & Data Analysis from ABL Diagnostics

ABL's reagents and data analysis provides superior genotyping & drug resistance through sequencing with open platform capability

END-TO-END GENOTYPING SOLUTION



Robotic Library Prep systems



Sequencers
OPEN VALIDATED PLATFORMS

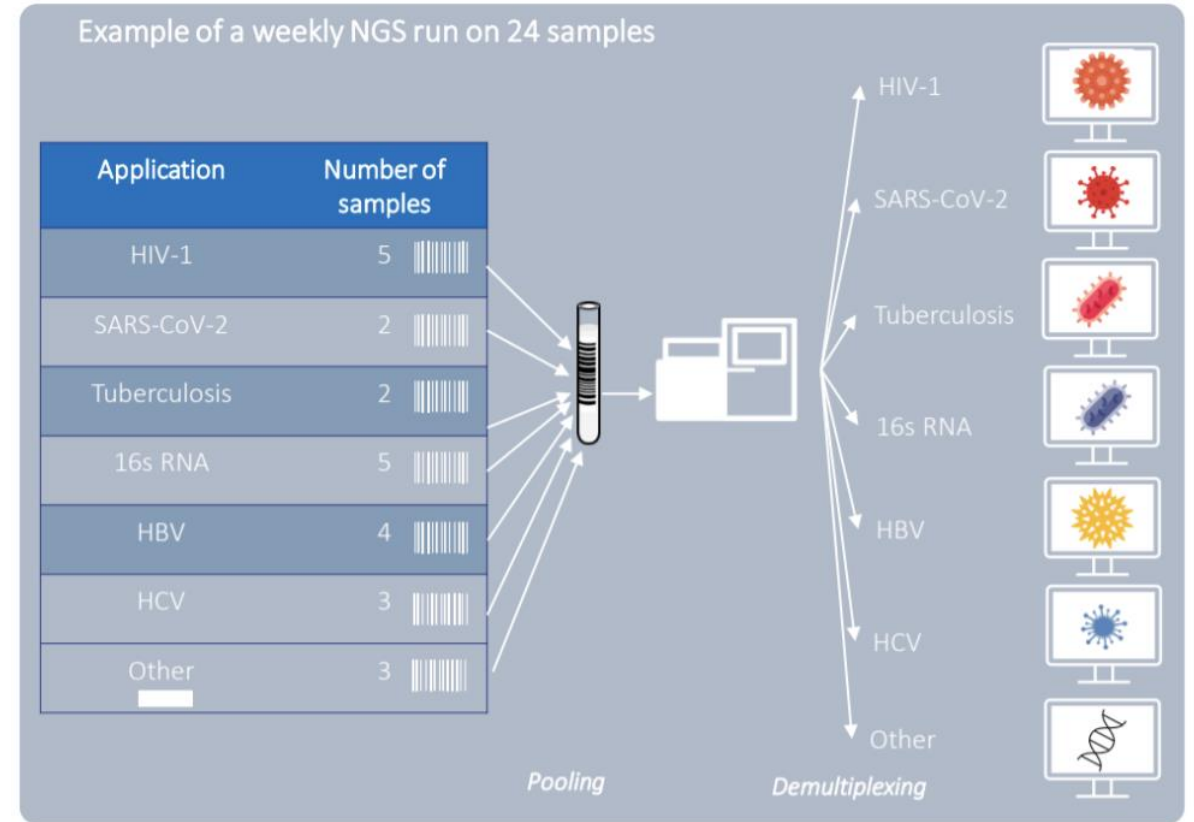


Multiplexing and Pooling Capability via DeepChek® Assays

ABL provide the ability to pool different viral & bacterial targets in one run

The DeepChek® NGS assays can provide value to a large range of microbiology applications simultaneously as follows :-

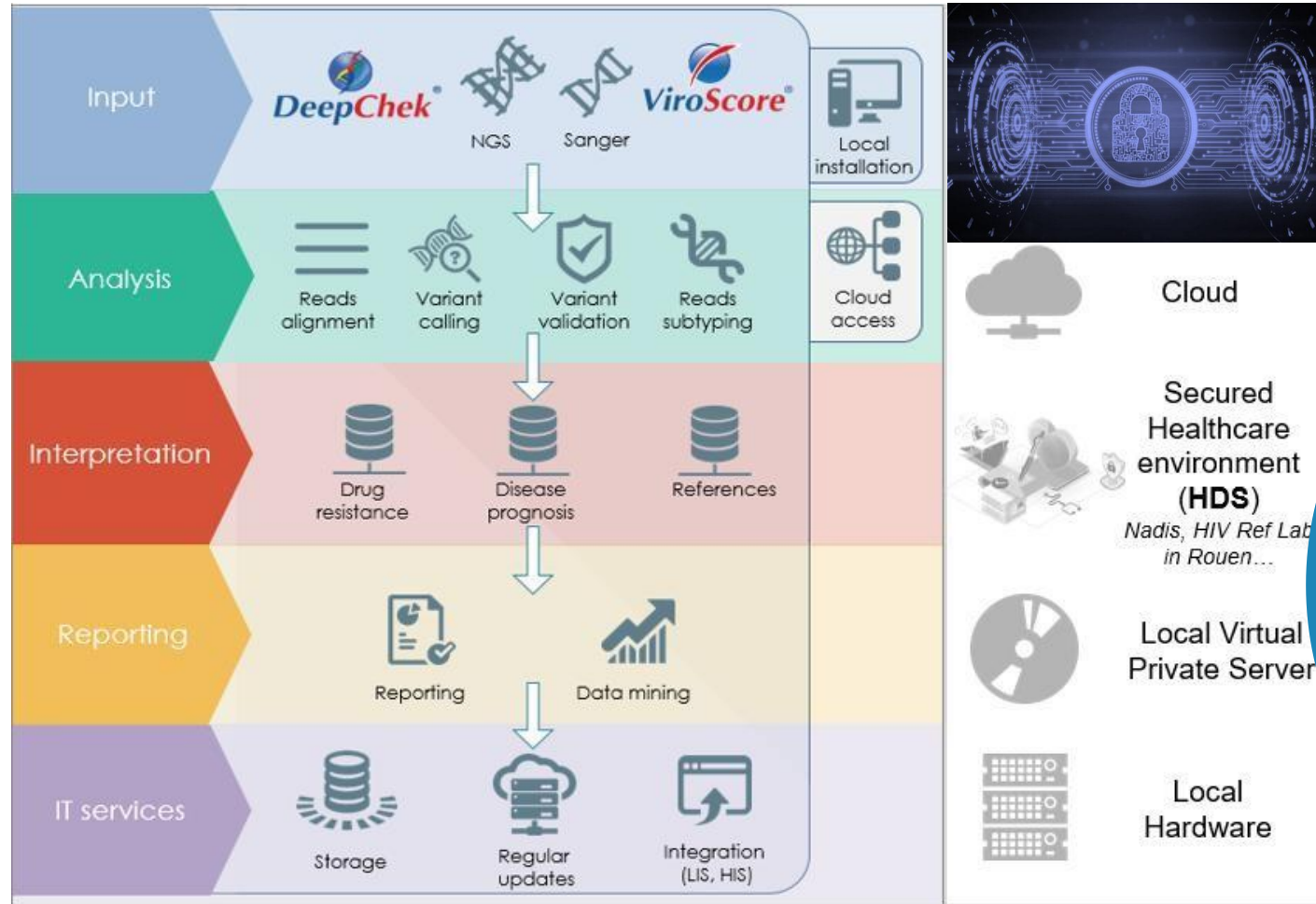
- Expands NGS capacity to any lab settings with an ability of lower volume and wider range of testing
- Lowers ABL reagents usage
- Delivers higher efficiency of human resources
- Pooling fully clinically validated mutualising viral and bacterial diseases
- Assays are validated on a range of sample types for example for the HIV –1 Assay both RNA and well as Proviral DNA samples can be used. Validation is in progress for Dried Blood Spots too



In-House Cloud-Based Data Analysis Capability

Designed for lab technicians as well as bioinformaticians

SOFTWARE DEVELOPMENT EXPERIENCE



- Consistent template design
- Clinically validated
- Cumulative reporting
- Expedient filtering
- Inhouse designed
- Cloud-based software
- Sanger compatible
- SepHepB database access for HBV



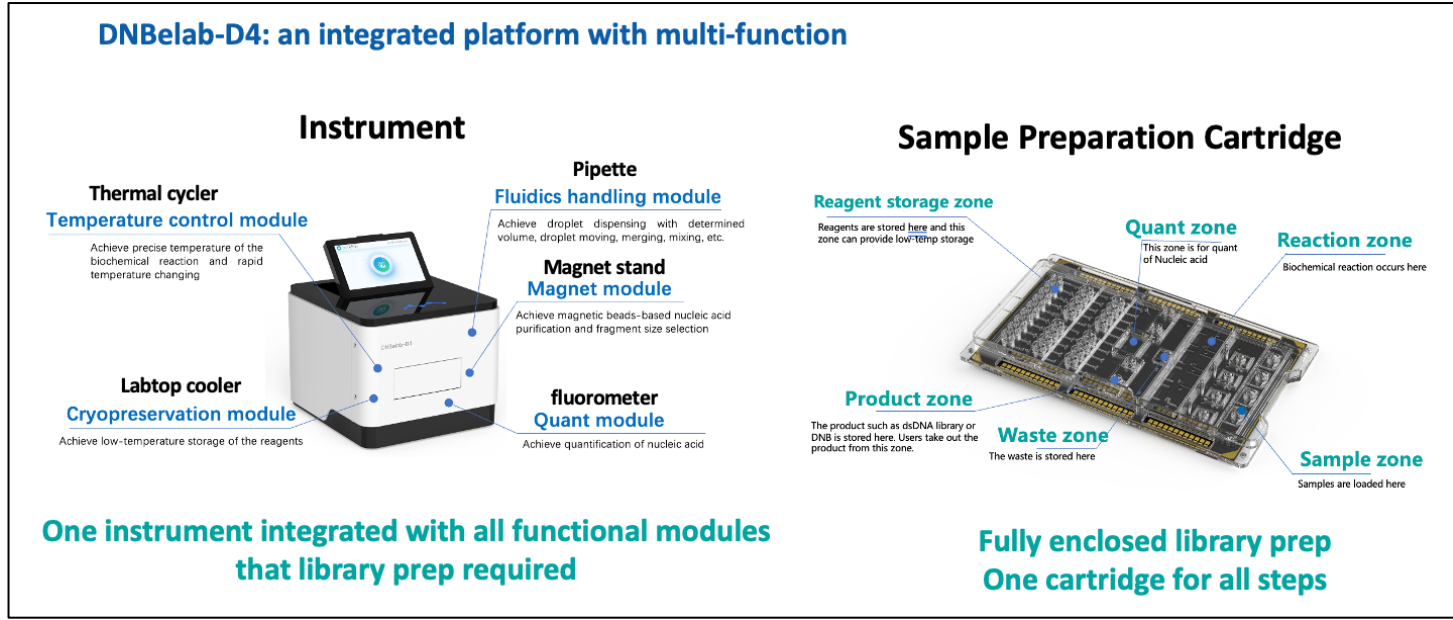
Value Differentiation of ABL Diagnostics

Value Contribution	Value Differentiation
Broad range of infectious disease NGS genotyping & drug resistance	<ul style="list-style-type: none"> • HPV, HIV, HBV, HCV, HDV, CMV, BKV, HSV • SARS-CoV-2, Influenza, RSV • TB, 16s/18s RNA, Salmonella, Campylobacter + Microbiome
Unique targeted genotyping & drug resistance detection	<ul style="list-style-type: none"> • Detection of APOBEC enzyme signature mutations for HIV-1 • Amplification of V1-V9 regions for 16s rRNA bacteria detection • HPV detection of pre-cancerous cervical lesions with Pasteur Institute • HBV WGS aids in liver disease prognosis as well as in drug resistance and vaccine escape studies
Comprehensive sample capability	<ul style="list-style-type: none"> • Assays are validated on a range of sample types for example for the HIV –1 Assay both RNA and well as Proviral DNA samples can be used. Validation is in progress for Dried Blood Spots too
Open-platform compatible and validated with major sequencer systems and library prep robots	<ul style="list-style-type: none"> • Illumina (incl. Miseq 100), ThermoFisher, MGI, ONT, PacBio • Hamilton, Sanger platforms
Inhouse cloud-based reporting software with homogeneous design	<ul style="list-style-type: none"> • Consistent design of test reports from the one software platform • Cloud-based enables a user-friendly platform with HDS certification • Cumulative report capturing historical patient tests • Rapid rollout of software updates and enhancements for short and long reads • SeqHepB database access via acquisition of Evivar Medical for HBV WGS
Unique fast filtering patented software	<ul style="list-style-type: none"> • The in-house filtering algorithm enables high quality expedient data curation
Speed & accessibility through pooling	<ul style="list-style-type: none"> • Fast turnaround with small to mid-scale lab due to pooling capability • Pooling fully clinically validated mutualising viral and bacterial diseases • No need to wait for high volumes for platforms which require higher throughput.
Unique regulatory certification	<ul style="list-style-type: none"> • The only CE-IVD approved WGS solution for HIV-1 • CE-IVD solutions enabling easy integration into IVD clinical workflows • Ongoing compliance activities ongoing for IVDR registrations
Cost-effective reagents and systems	<ul style="list-style-type: none"> • Pricing and software is targeted for the budgets of small to mid tier labs



Compatibility with MGI Systems

Automated
Library
preparation
DNBelab-D4



G-400 Sequencer

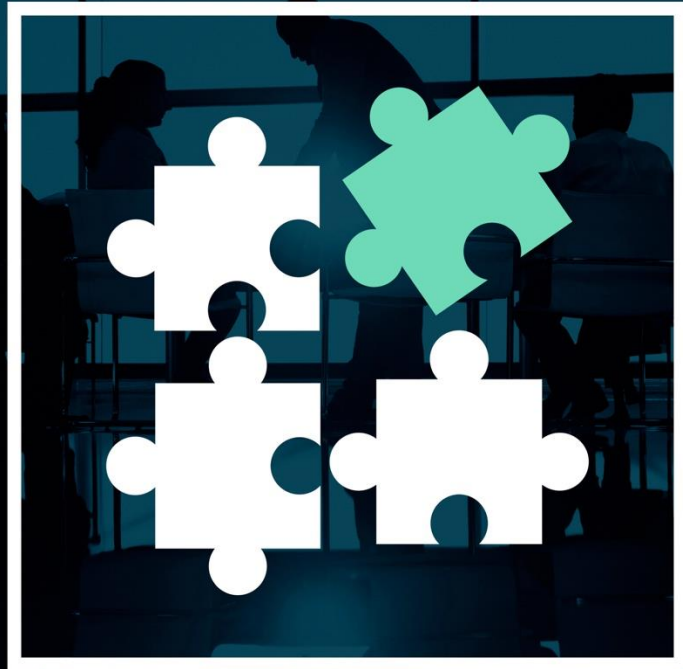


G-99 Sequencer



E-25 Sequencer





07

Service & Customized Solutions

Mediquip provides national coverage with 40 yrs experience enhanced by digital twinning from AirLabOne

Equinox provides predictive preventative maintenance as well as national coverage through its two service partners :-

Mediquip Services:



- Field service engineers within two hours drive of 90 percent of Australia's population
- 40 year history in Australia
- Offices in Sydney, Melbourne, Brisbane, Perth and Adelaide
- Warehouses across Australia, and
- National system servicing contract with BioRad

Air Lab One Services:



- A digital twin is made of each system which through sensors enable predictive preventative maintenance notification
- twin computing system designed to address the specific maintenance demands of high-speed laboratories



Equinox Value Proposition in Laboratory Solutions

We listen, partner, design and deliver solutions for our customers with longevity

Equinox Medical is committed to excellence, serving as your end-to-end partner for laboratory requirements through the following services :-

Consulting Services:

- Listening to laboratories requirements and advising on fit-for-purpose instruments and reagent purchases
- Ensuring longevity of systems through collectively agreeing on forecast client demand growth

Customisation:

- Tailoring system & reagent panels and protocols for:
 - Nucleic Acid Extraction
 - qPCR Mixes
 - NGS Kits

Resourceful Distributor:

- Partnering with multiple manufacturers globally to offer sustainable solutions





Thank you

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