



# Equinox Medical: Pathology Solutions

**Committed to enhancing patient  
outcomes via innovative solutions**



We are an Australian owned company providing targeted molecular diagnostic systems/consumables, orthopaedic implants/instruments, and healthcare technology innovations. Our innovations are locally designed and released to the Australian market which are supported by Australian and global manufacturer partnerships.

Through our strategic 3PL partner, we provide an efficient cost-effective service with local and international delivery networks to Australian metropolitan & regional centres and end-to-end product tracking.

# Renowned Clinicians & Experienced Executive Management Team



**PROF. MICHAEL COOPER, OAM**  
Chairman & Board Director

- Internationally-recognised multidisciplinary surgeon in endometriosis, fertility and advanced endoscopic surgery
- 26-years of experience
- Clinical Associate Professor of Sydney University Department of Obstetrics & Gynaecology



**A/PROF. ANDREW LEICESTER**  
Chief Medical Officer

- Renowned Orthopaedic surgeon based in Bowral, with part time duties at Sydney Children's Hospital and Goulburn
- 26-years of experience
- Associate Professor of University of Wollongong



**GERRY ZHAO**  
Board Finance Director

- 20-years' experience in private equity advisory and investment
- Advised numerous global corporate and private equity funds on M&A and capital raisings
- VP Corporate Development at Neuren Pharmaceuticals



**ADAM CROWE**  
Chief Executive Officer

- 35-years' experience in business development & operations
- Specialist in procurement, supply chain and healthcare sales
- Delivered sustainable value to major healthcare companies in categories such as prostheses, pathology & radiology, pharmaceuticals & medical consumables



**DAVID MITCHELL**  
Director, Business Development & Sales

- Over 20-years' experience in marketing and sales management roles in leading pharmaceutical companies
- Profound Experience in Launching Products for Specialist and Hospital Markets, Demonstrating a Comprehensive Understanding of Industry Dynamics



**DINESH SAMARASINGHE**  
Pathology Director

- Over a decade of extensive experience in Laboratory Clinical Diagnostics, encompassing Chemistry, Immunology, Hematology, Molecular Diagnostics, Point-of-Care Testing, Workflow IT Solutions, and Quality Control Measures
- Emphasis on Business Development and workflow consulting in Medical Diagnostics



**FRANK FAN**  
Chief Financial Officer

- Statistical analysis and financial forecasting Analysing financial data and performance to explore investment opportunities and evaluate performance
- Developing Financial modelling and forecasting development for long- and short-term commercial plans.



**SAMPURNA GHOSH**  
Pathology - Senior Manager

- Over a decade of experience in Clinical Diagnostics encompassing Molecular Diagnostics, Cytogenetics, Biochemistry, Microbiology, Immunology, Hematology, Serology and Clinical Pathology
- Specialist in Product Management, Marketing, Procurement and Development for In-Vitro Diagnostics (IVDs) and Medical Devices.



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*01*

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# Executive Summary

# Next Generation *Pathology*

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## Executive Summary

Equinox Medical stands at the forefront of life sciences innovation, excelling in the development of cutting-edge technologies for nucleic acid extraction systems, qPCR platforms, and a comprehensive range of specialized reagents. In addition to our standard product offerings, we provide tailor-made solutions for extraction processes, qPCR workflows, and Next-Generation Sequencing (NGS) reagent panels.

Our overarching mission is to empower clinical diagnostics and research laboratories with the tools they need to conduct exceptionally accurate, efficient, and high-caliber testing across a variety of clinical samples.





# Focused Product Selection Delivers Value to Patients

## Pathology Diagnostics

Launching innovative solutions to the marketplace to impact and improve Public Health.



## Personal Protective Equipment (PPE)

Working with manufacturers to provide reliable, consistent and high-quality consumables for medical institutions.



## Prostheses

Cutting-edge solutions and support for Orthopaedic surgeons specialised in Trauma and Spine with an expanding portfolio into other specialties.





# Support during the COVID Pandemic

## Equinox Products Supplied in FY20-FY22



2.5m+ COVID tests



250+ trauma implant cases



450,000 gowns



9m+ gloves



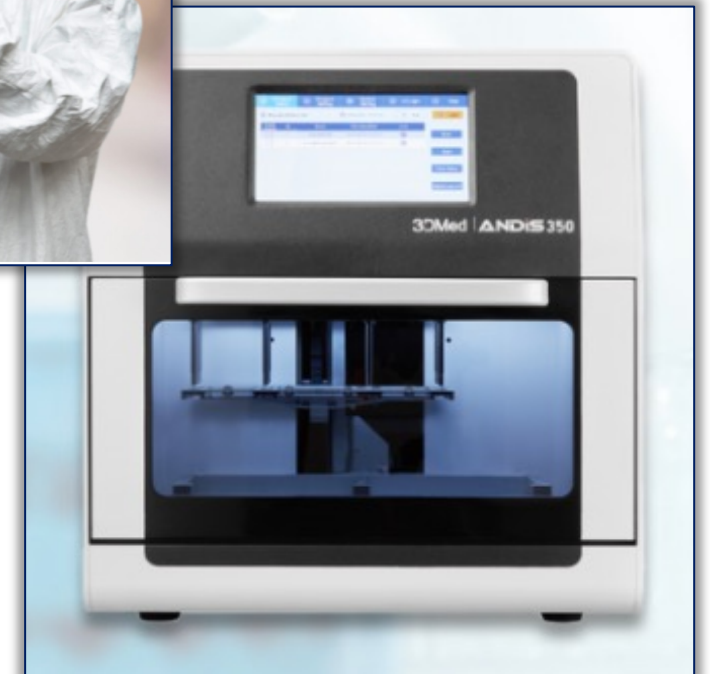
5m+ masks



A\$27m+ revenue



Over 10 Australian R&D investments



# We Support Local Communities and Nations with PPE



## Aiding Lismore Flood Relief Effort

Equinox Medical contributed to emergency response and disaster recovery with two PPE shipments, including 64 cartons of protective suits. In collaboration with Lismore City Council and Resilient Lismore, we donated an additional 34 cartons of Level 3 surgical gowns to Lismore Hospitals.



## Donating PPE to Tongan Earthquake Relief Efforts

Dr. Andrew Leicester, representing Equinox Medical, received a recognition certificate from the Princess of Tonga for our contributions to the Tongan Earthquake Disaster Relief Program. Equinox Medical donated over 40,000 essential PPE items, including adult and child N95 respirators, surgical masks, gowns, isolation gowns, protective suits, and nitrile gloves, to support the ongoing relief efforts after the February 2022 earthquakes.



# Support from our Leading Healthcare Clients & Partners



## Public Hospitals



## Private Hospitals



## Manufacturers



## Healthcare Services



## Aged Care



## Logistics







02

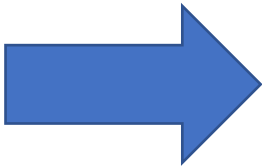
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# Automated Nucleic Acid Extraction Systems

# Exclusive distribution of Nucleic Acid Extraction Systems



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



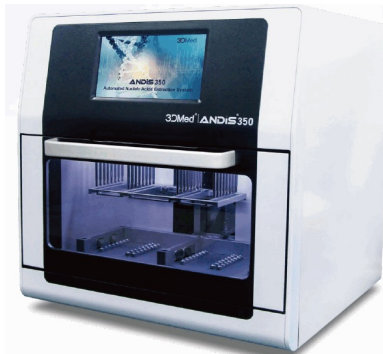
MultiEx32



MultiEx96



ANDiS 360



ANDiS 350

\*MultiEX32 & MultiEX96 pending TGA approval





## MultiEX32: Automated Nucleic Acid Extraction System



### System Specifications

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





## EX96: Automated Nucleic Acid Extraction System



### System Specifications

<b>Sample types</b>	Serum, Plasma, Saliva, and other body fluids
<b>Reaction Volume</b>	50µl-1000µl
<b>Sample Throughput</b>	96
<b>Magnetic beads recovery rate</b>	96%
<b>Extraction variation</b>	CV < 5%
<b>Heating temperature</b>	Adjustable from room temperature to 125°C/257°F
<b>Reagent type</b>	Magnetic bead-based open-source reagents
<b>Extraction time</b>	20min-40min/run (depending on reagent types and volumes)
<b>Well plate</b>	96 deep well plate
<b>Mixing Intensities</b>	Adjustable : 8 Levels
<b>Max. Stirring Speed</b>	10Hz
<b>Display</b>	10-inch colour touch screen
<b>Memory</b>	>500 programs
<b>Program management</b>	Add, edit, and delete programs
<b>UV lamp</b>	Yes
<b>Light</b>	Yes
<b>Device size</b>	700 × 475 × 370(mm)
<b>Device weight</b>	40-45kg



# Additional Features EX32/EX96

## MultiEX32 Nucleic Acid Extractor



### Key Features:

- 10-inch high-sensitivity touchscreen
- System Check Feature
- Plate drawer
- Audible alarm
- Replace motor after 50,000 runs (1,600,000 tests)

## MultiEX96 Nucleic Acid Extractor



### Key Features:

- 10-inch Intuitive UI & sensitive touchscreen
- Self-diagnostic system checks
- Shield plate to contain spillage
- Audible alarm
- Change Motor after 11,500 runs (1,104,000 tests)

\*MultiEX32 & MultiEX96 pending TGA approval





## ANDiS 360: Automated Nucleic Acid Extraction System



### System Specifications

<b>Sample types</b>	Nasopharyngeal/oropharyngeal swabs, cervical swabs, saliva, sputum, urine, stool, FFPE tissue whole blood.
<b>Reaction Volume</b>	30µl-12000µl
<b>Sample Throughput</b>	16/32
<b>Magnetic beads recovery rate</b>	> 95%
<b>Extraction variation</b>	CV < 3%
<b>Heating temperature</b>	Adjustable from room temperature to 115°C/240°F
<b>Reagent type</b>	Magnetic bead-based open-source reagents
<b>Extraction time</b>	8 minutes for Viral RNA
<b>Well plate</b>	96 deep well plate (large and small volume)
<b>Operation system</b>	Android system with touch screen
<b>Memory</b>	Up to 500 programs
<b>Program management</b>	Add, edit, and delete programs
<b>UV lamp</b>	Yes
<b>Light</b>	Yes
<b>HEPA Filter</b>	Yes
<b>Device size</b>	442 × 445 × 490 (mm)
<b>Device weight</b>	35kg







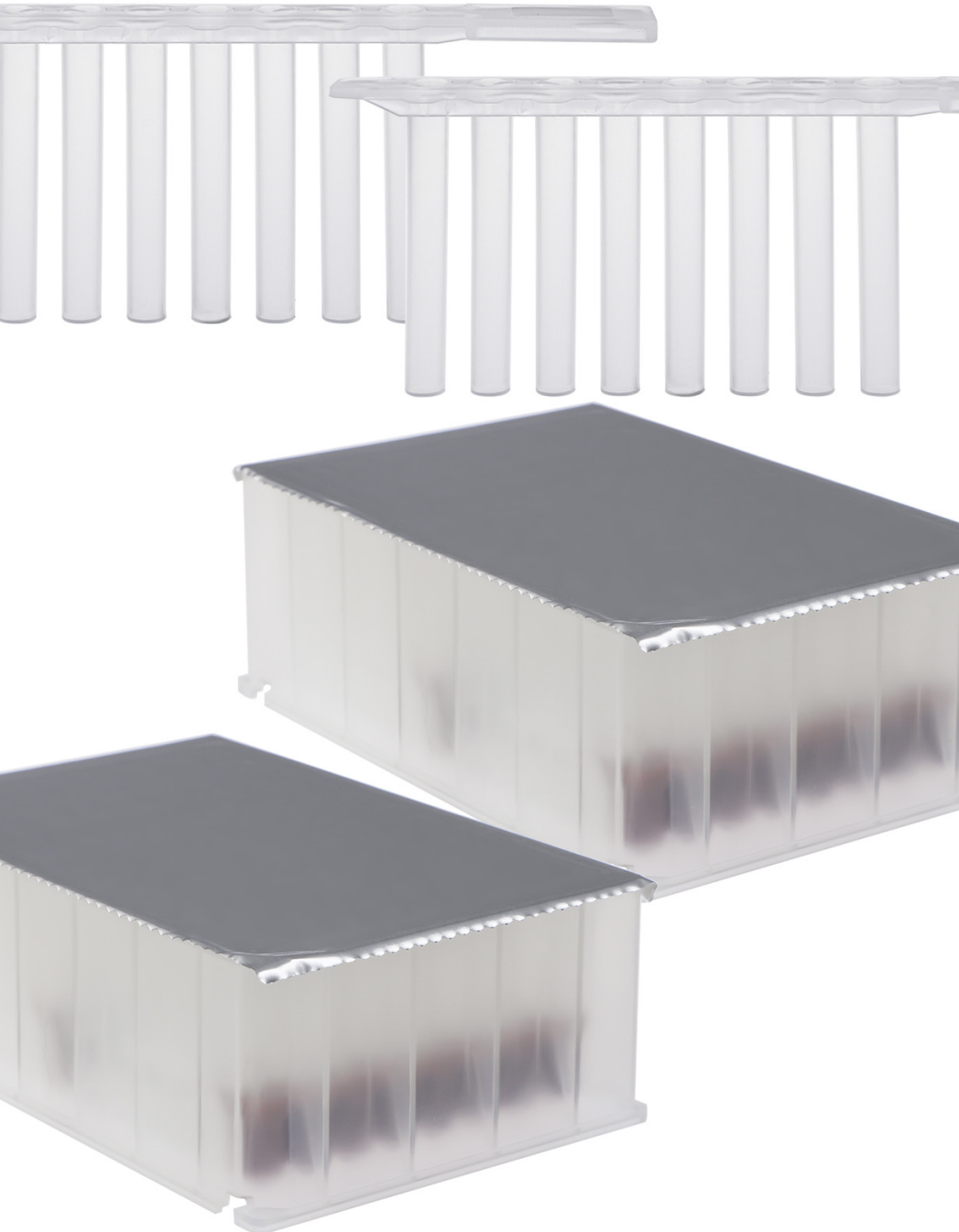
## ANDiS 350: Automated Nucleic Acid Extraction System



### System Specifications

<b>Sample types</b>	Nasopharyngeal/oropharyngeal swabs, cervical swabs, saliva, sputum, urine, FFPE tissue whole blood, stool.
<b>Reaction Volume</b>	30µl-1000µl
<b>Sample Throughput</b>	16/32
<b>Magnetic beads recovery rate</b>	> 95%
<b>Extraction variation</b>	CV < 3%
<b>Heating temperature</b>	Adjustable from room temperature to 115°C/240°F
<b>Reagent type</b>	Magnetic bead-based open-source reagents
<b>Extraction time</b>	30-60 mins (reagent dependent)
<b>Well plate</b>	96 deep well plate
<b>Operation system</b>	Android system with 17 inch touch screen
<b>Memory</b>	Up to 500 programs
<b>Program management</b>	Add, edit, and delete programs
<b>UV lamp</b>	Yes
<b>Light</b>	Yes
<b>Device size</b>	400 × 400 × 450 (mm)
<b>Device weight</b>	35kg





03

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*Pre-filled RNA &  
DNA Extraction Kits*

# Four E's 32/96 Well Extraction Kits

Extraction Kit	Sample type	Features
Magnetic Bead Swab Genomic DNA	Suitable for oral samples such as oral swabs, pharyngeal swabs and mouthwash	<b>High efficiency:</b> Fast extraction speed, genomic DNA can be obtained in a short time. <b>High purification:</b> The purified DNA OD260/280=1.7~1.9, with high quality. <b>High throughput:</b> Suitable for manual extraction, also can be integrated with Nucleic Acid Extractor, pipetting method automatic instrument to carry out high throughput extraction experiment.
Magnetic Bead Saliva Genomic DNA	Suitable for fresh or frozen saliva samples	
Magnetic Bead Blood Genomic DNA	Suitable for fresh or frozen saliva samples	
Magnetic Bead Urine Genomic DNA 200ul	Suitable for urine samples	
Magnetic Bead Tissue Genomic DNA (Dried Blood Spots)	Suitable for Dried Blood Spots samples	
Magnetic Bead Stool Genomic DNA (with Disruptor Beads)	Suitable for frozen stool samples	
Magnetic Bead FFPE Tissue Genomic DNA	Suitable for formalin tissues, paraffin-embedded tissues	
Magnetic Bead Bacterial Genomic DNA (Lysozyme, Proteinase K)	Suitable for Gram-negative bacteria, Gram-positive bacteria, pathogenic bacteria in food	









# Four E's 32/96 Well Extraction Kits

Extraction Kit	Sample Type	Features
Magnetic Bead TORCH Pathogen DNA/RNA	Suitable for whole blood and other samples.	Developed for TORCH assays to meet the needs of microarray and qPCR test.
Magnetic Bead EB Viral DNA	Suitable for whole blood and other samples.	Developed for EB virus assays to meet the needs of microarray and qPCR assays.
Magnetic Bead HPV DNA	Suitable for cervical secretion, cervical swabs and other samples	Specially developed for HPV detection and meet the needs of HPV chip detection and qPCR detection.
Magnetic Bead High Sensitivity HBV DNA	Suitable for plasma isolation and purification of high-quality hepatitis B virus DNA and other samples.	High sensitivity: the sensitivity is increased to 5IU/ml without changing the current PCR detection mode.
Magnetic Bead High Sensitivity HCV/HIV RNA	Suitable for plasma isolation and purification of high-quality viral RNA.	High sensitivity: High sensitivity: the sensitivity is increased to 15IU/ml without changing the current PCR detection mode.



# 3DMed Extraction Kits for Infections Disease & Genetic Testing

	32A Viral RNA Extraction Kit	Pathogen Nucleic Acid Extraction Kit	ReadiMag FFPE RNA/DNA Extraction Kit	ReadiMag gDNA Extraction Kit
<b>System Compatibility</b>	ANDiS 350/360	ANDiS 350/360	ANDiS 350/360	ANDiS 350/360
				
<b>Sample type</b>	Nasopharyngeal, Oropharyngeal, Saliva, Cervical	Bronchoalveolar lavage fluid, Sputum	FFPE tissue	Saliva, whole blood and buffy coat
<b>Run time</b>	<15 minutes (Dependant on sample types and instrument used)	<15 minutes (Dependant on sample types and instrument used)	45 minutes	50 minutes
<b>Sample input volume</b>	200-400µL	<400µL	5-40µm	<200µL
<b>Elution volume</b>	100µL	100µL	50µL	50µL





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# Real Time Quantitative PCR System



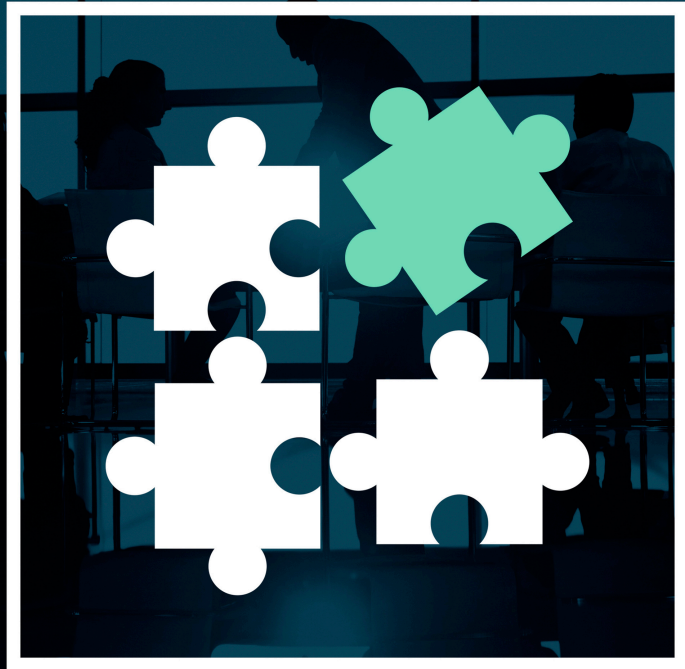


## Q96: Real-Time Quantitative PCR



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 heating & cooling rate of block	≥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





04

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*Customised Solutions*

# Your Trusted Partner in Laboratory Solutions

Equinox Medical is committed to excellence, serving as your end-to-end partner for laboratory needs.

## Consulting Services:

- Specialised consultancy for laboratories in instrument and reagent purchases.

## Customization:

- Tailored reagent panels and protocols for:
  - Nucleic Acid Extraction
  - qPCR Mixes
  - NGS Kits

## Resourceful Distributor:

- Partnered with multiple manufacturing firms to offer a wide array of products.







05

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## *Personal Protective Equipment (PPE)*



# Equinox Distributes PPE from Global Leaders

## Surgical & Isolation Gowns



## Caps & Berets



## Sterilisation Wrap



## Adult & Child Masks



## Level 2 & 3 N95/P2 Particulate Respirators



**WEGO**



05

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## *Development Pipeline (RUO)*

## Key Features:

- 10-inch touchscreen with intuitive UI
- Turntable design
- Scanning module to avoid plate placement errors
- Liquid class value adjustments to achieve accurate aspiration volume control
- Precision pipetting module
- Magnetic separation module
- Liquid handling accuracy: 1uL CV <5%
- 96 Channels
- Volume Range: 5-200uL
- 18 Decks
- Temperature Range: 0-80 C
- 2x USB ports w/ Ethernet
- Weight: 45 Kg



**Expected Release: December 2023**





The DNA test panels identify specific SNPs within your genes that are associated with your predisposition to develop certain health conditions. We only include genes that have high-quality research and well-documented evidence behind them.

The DNA Nudge, recognized for its rigorously researched DNA test panels, is now **TGA-approved for COVID-19 testing**. The tests identify specific SNPs within genes linked to a predisposition for certain health conditions, ensuring accurate and clinically meaningful results. As CEO Chris Toumazou emphasizes, these genetic markers are carefully selected based on population studies involving hundreds of thousands of people. In line with our commitment to innovation and accuracy, we are currently in the process of expanding our panel to include additional respiratory markers.

- 1) Choose Your Nudge
- 2) Return a cheek swab
- 3) Receive DNA report directly onto the DnaNudge App
- 4) Scan your smartphone while shopping to personalise your purchases based on your DNA



## Nutrition Nudge

In this personalised report, we analyse 8 nutrition-related genetic traits and link these to macronutrients in the food we eat, enabling you to make the healthiest choices for you every time you shop - simply by scanning the product barcode to see if it's red or green for you.



## Skincare Nudge

In this personalised report, we analyse 8 skin-related genetic traits and link these to ingredients in the facial skincare we use, enabling you to make the best choices for your skin every time you shop - simply by scanning the product barcode to see if it's red or green for you.



## Active Nudge

For ultimate personalisation of your DNA test results, your Active Nudge will constantly update your DNA-based recommendations in real time, monitoring your inactivity levels throughout the day and relating these back to your available GREEN product choices.



<https://www.dnanudge.com/>



# Equinox MDS Demo Lab at The University of Sydney



We're thrilled to announce the arrival of our latest cutting-edge NGS Sequencing Support Systems at our **Molecular Diagnostics & Sequencing Demo Lab**.



All our systems in the lab are designed to make your molecular diagnostics and sequencing work easier, faster, and more efficient.





# Thank you

## **Contact Information**

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NSW 2006

Website: <https://equinoxmedicalgroup.com/>

Four E's: <https://www.youtube.com/watch?v=MfBy0oZbk4g&t=87s>

Four E's MultiEX32:

<https://www.youtube.com/watch?v=lv88ekAEkhM> (Intro)

<https://www.youtube.com/watch?v=xFGuO3Vrlek> (Operational)

Four E's qPCR:

[https://www.youtube.com/watch?v=SQNS\\_07d0Ss](https://www.youtube.com/watch?v=SQNS_07d0Ss)

