CONVENZIS

Welcome to the 05th NHS Pathology Conference!

01st July 2025
15 Hatfields Conference Centre, Chadwick Court, London, SE1 8DJ

NHS
North West London Pathology

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NHS
North West London Pathology

Chair Opening Address

Saghar Missaghian-Cully
Managing Director
North West London Pathology

NHS
North West
London Pathology

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Keynote Presentation

Professor Michael Osborn

National Speciality Adviser Pathology – Resilience & Sustainability, Clinical Lead Pathology - London Region, Clinical Director North West London Pathology

NHSE, North West London Pathology

NHS
North West
London Pathology

NHS England Pathology

Pathology at the Crossroads:

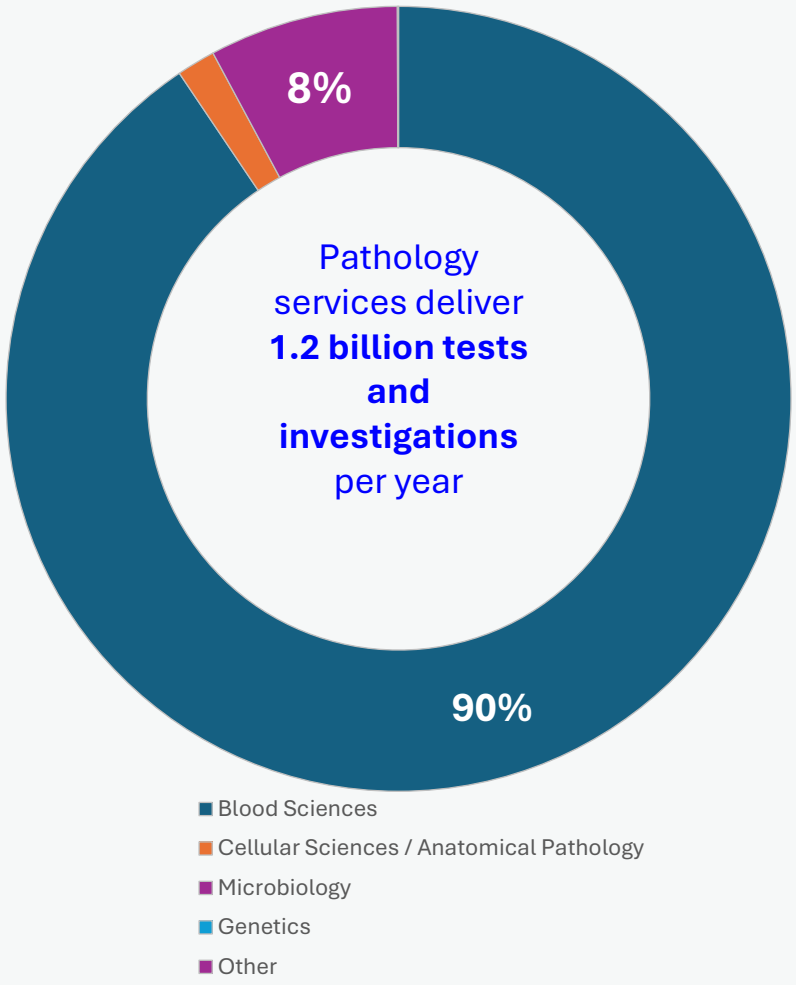
Building a Sustainable and Resilient Future for Diagnostic Services

June 2025

Professor Mike Osborn,
National Speciality Advisor for Pathology, Sustainability and Resilience, NHS England
Pathology Transformation
Clinical Director Northwest London Pathology

For further information contact: england.pathservices@nhs.net

Pathology in England



95% of all healthcare decisions that affect diagnosis or treatment involving a pathology investigation.

Key Government Priorities in Health

The 2025/26 NHS Planning Guidance sets out clear priorities to:

- Continue to reduce elective care waiting times, with 65 per cent of patients waiting less than 18 weeks
- Improve ambulance response and A&E waiting times, with a minimum of 78 per cent of patients seen within four hours
- Improve patients' access to general practice (GP) and urgent dental care access, including 700,000 additional urgent dental appointments
- Accelerate patient flow in mental health crisis and outpatient care pathways

Pathology Priorities

Priorities for 2025/26

1. Ensure delivery of pathology networks, that are mature across all domains
2. Support Histopathology Transformation and Recovery, with the implementation of the 6-Point Histopathology Improvement Plan

- **Reduce unwarranted variation**
- **Provide the best possible pathology service for all**

Pathology Networks

Where are we now

Pathology provisions in England are organised into 27 pathology networks

North West Region

N3 Lancashire & South Cumbria Pathology Collaboration
N4 Cheshire and Merseyside Pathology Network
N5 Greater Manchester Pathology Network

Midlands Region

ME1 Black Country Pathology Services
ME2 Midlands & East 2
ME3 Birmingham & Solihull Pathology Network
ME4 South Midlands Pathology
N8 North Midlands & Cheshire Pathology Service

London Region

L1 North West London Pathology Service
L2 North Central London Pathology Network
L3 NHS East & South East London Pathology Partnership
L4 South East London Pathology
L5 South West London Pathology Service

North East and Yorkshire Region

N1 North East & North Cumbria Pathology Network
N2 West Yorkshire & Harrogate Pathology Network
N6 South Yorkshire & Bassetlaw Pathology Network
N7 Scarborough Hull York Pathology Service

East of England Region

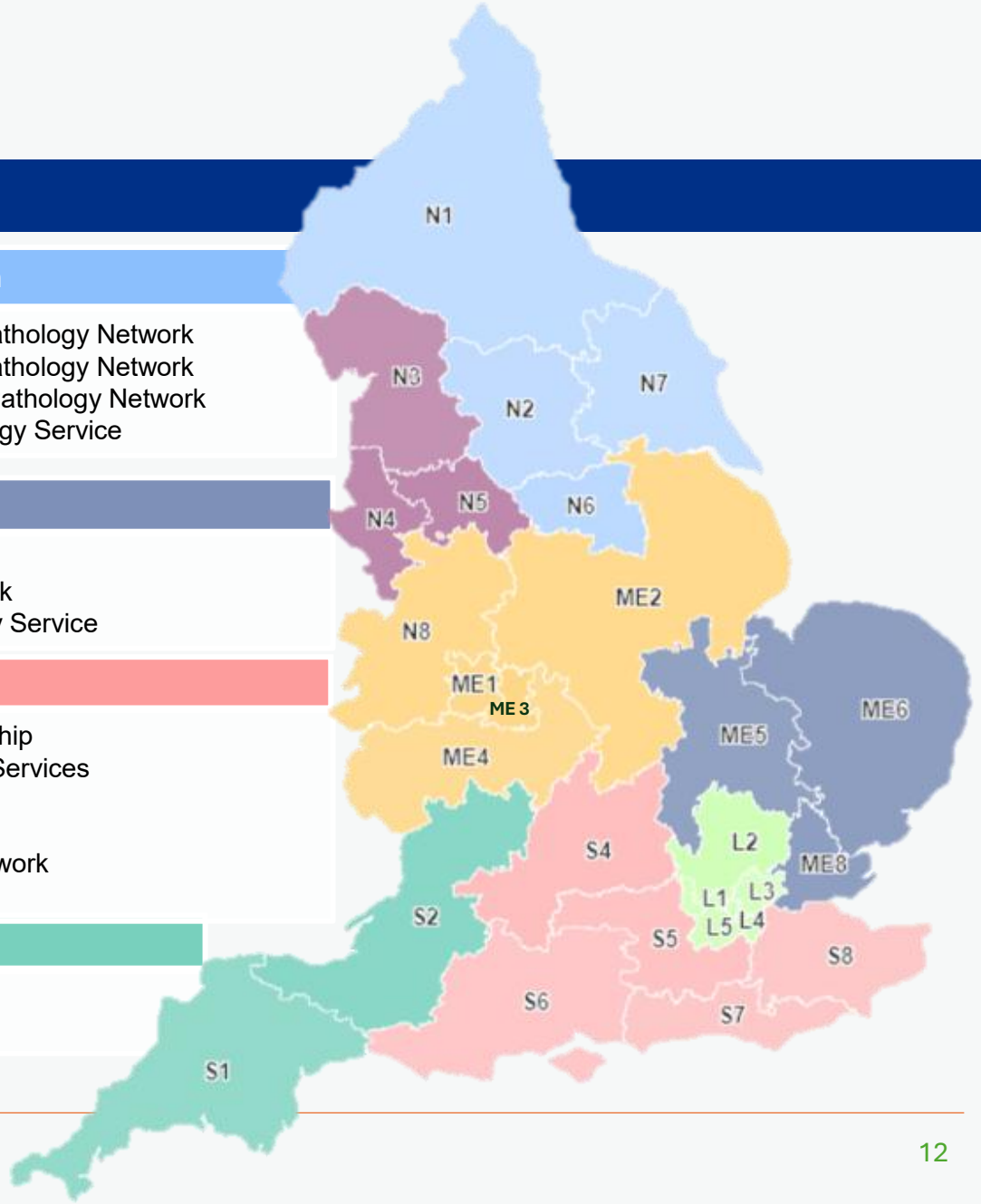
ME5 Midlands and East 5
ME6 East Coast Pathology Network
ME8 Mid & South Essex Pathology Service

South East Region

S4 South Four Pathology Partnership
S5 Berkshire & Surrey Pathology Services
S6 Southern Counties Pathology
S7 Sussex Pathology Network
S8 Kent & Medway Pathology Network

South West Region

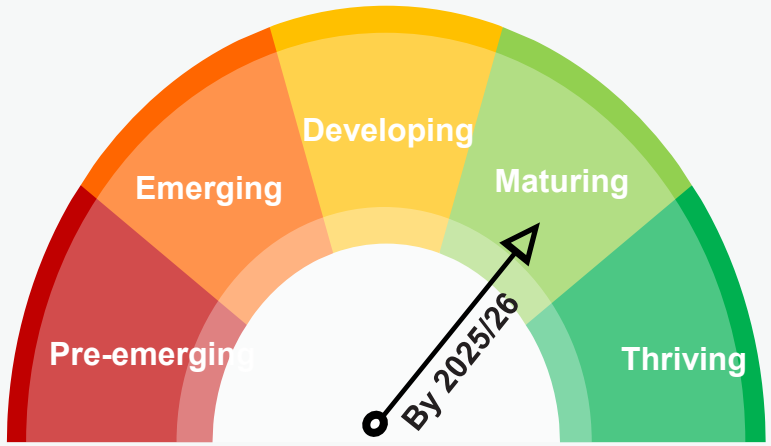
S1 Peninsula Pathology
S2 West of England Network

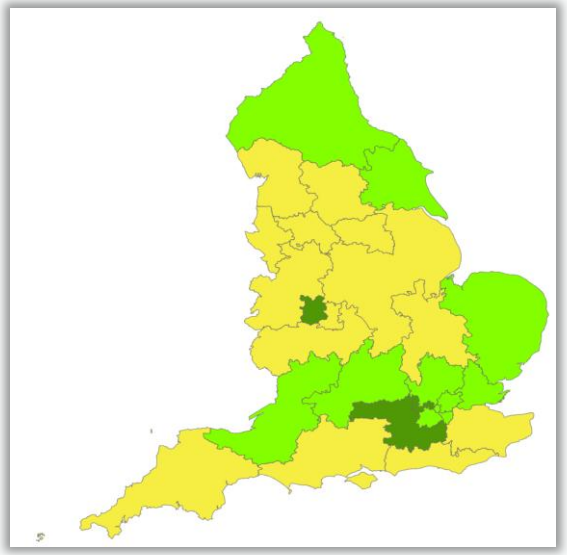


Our Commitment to Maturing Pathology Networks

Current State

As of 2024 …
13 pathology networks have reached at maturing or above





Examples of Challenges Faced by Pathology Networks

- Complexity of bringing together a cohesive governance framework across multiple NHS Trusts
- Capital investment in estate to enable ‘hub and spoke’ operating models
- Securing priority across a competitive landscape of priorities
- Funding post 2026

Benefits of Pathology Networks

- Reduce unwarranted variation in access to high quality pathology services
- Reduce unnecessary duplication
- Increase consistency and standardisation of laboratory practice
- Share best practice
- Training
- Job opportunities
- Resilience & crisis recovery
- Cost

Benefits of Pathology Networks

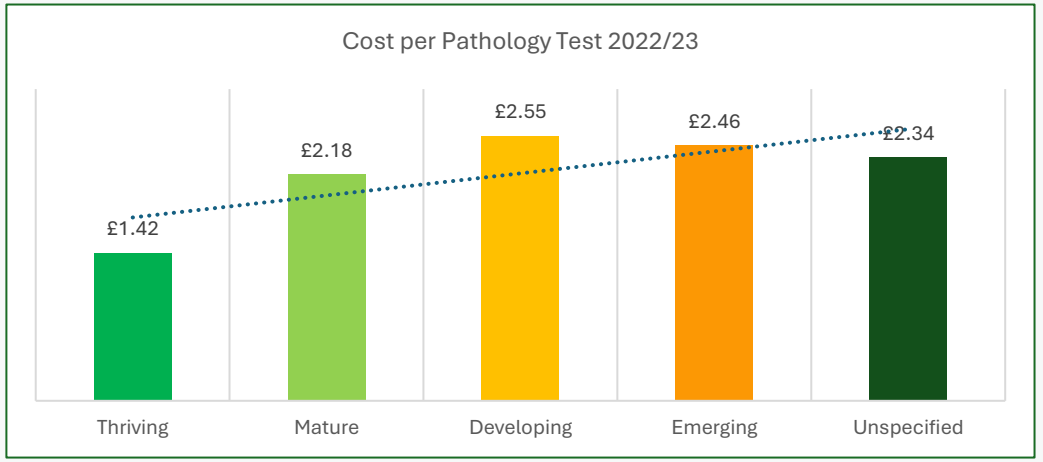
Improved Efficiency and Cost Savings

Enhanced Access to Specialist Expertise

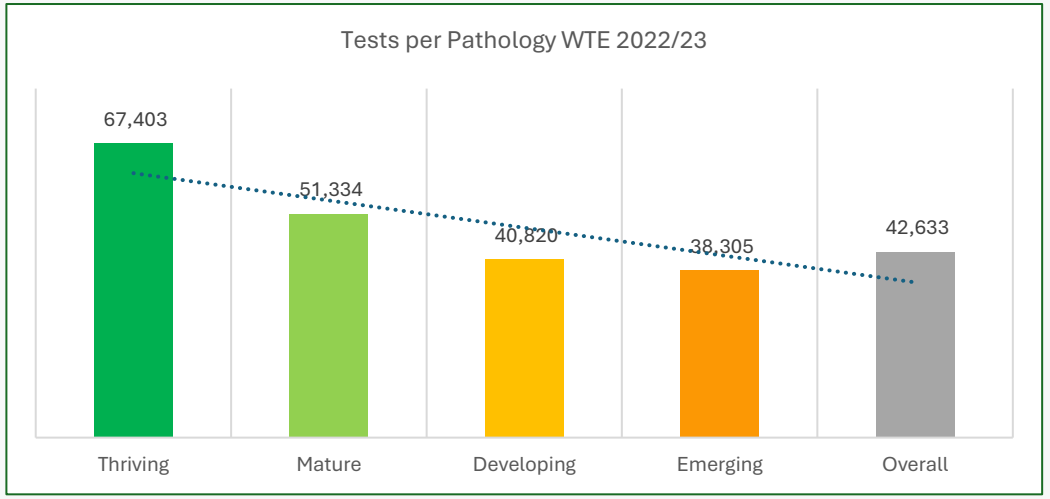
Increased Service Resilience

Innovation and Standardisation of Practices

Improved Turnaround Times and Patient Outcomes



More cost effective



More productive

How do have we prioritised Histopathology Services?

Six-Point Histopathology Improvement Plan

1

Workforce
Network histopathology workforce strategy (train, retain and reform)

Thinking differently about skill mix and working to the top of competency

Integration and expansion of Advance Practice

2

Process Optimisation
Data-driven optimisation of functional laboratory capacity through review of workflow processes

Identify and address unwarranted variation in performance and quality

3

Estate and equipment upgrades
Encourage local investment to locate histopathology laboratories in suitable estate.

Estate in many services is a physical barrier to embedding optimised workflows and automation.

4

Automation
Integrated laboratory automation enhances the efficiency and throughput of pathology services, delivering faster test results and improved patient pathways.

The reduction of manual, repetitive, time-consuming processes in favour of progressing scientific and service innovation also helps to attract/retain workforce.

5

Digital Pathology
Enhance collaboration between pathologists allowing better use of capacity across a network.

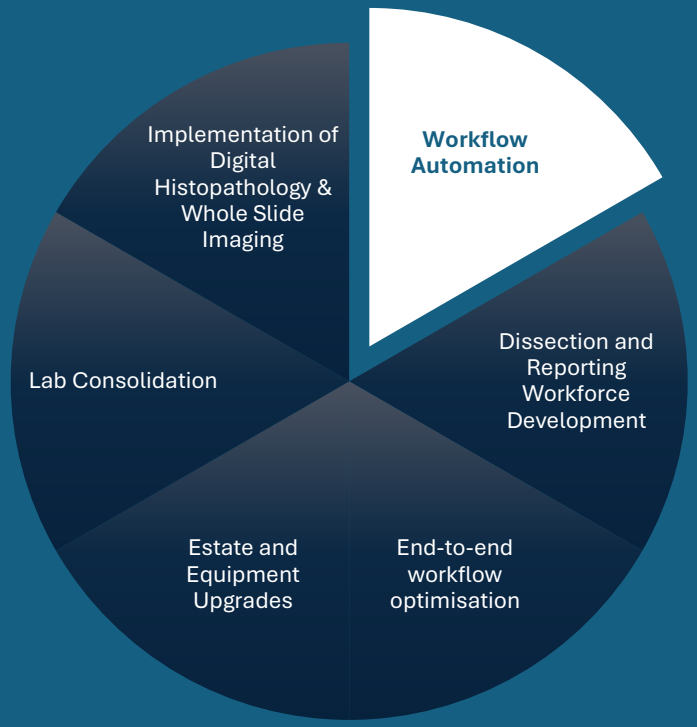
Digital pathology also readies histopathology services for AI as the technology rapidly advances.

The benefits of extended and flexible working can be further realised through the implementation of home reporting.

6

Service Consolidation
One of the benefits of consolidating pathology services into 27 networks, there are opportunities to consolidate several of the smaller labs within each network either physically or functionally, to leverage economies of scale to best effect.

Benefits of Automation



- **Optimising Workforce Utilisation:** Automation enhances collaboration across the pathology team, enabling trained Biomedical Scientists (BMS) and Advanced Practitioners (AP) to take on greater responsibilities. By optimising skill mix, consultant pathologists are able to dedicate their expertise to the most complex and high-impact cases, ensuring the best outcomes for patients while fostering professional growth across the entire pathology workforce.

- **Streamlining Workflow and Processes:** Automated systems reduce bottlenecks, standardise sample handling processes, and increase throughput, leading to smoother operations.

- **Improving Efficiency and Accuracy:** Automation can improve turnaround times, help clear backlogs, and enhances productivity while ensuring process standardisation, consistency, and minimising human error**.**

- **Ensuring Quality, Patient Safety, and Better Outcomes:** By reducing manual intervention and process variability, automation enhances reliability, ensuring patients receive accurate and timely diagnoses.

Acceleration of Digital Pathology

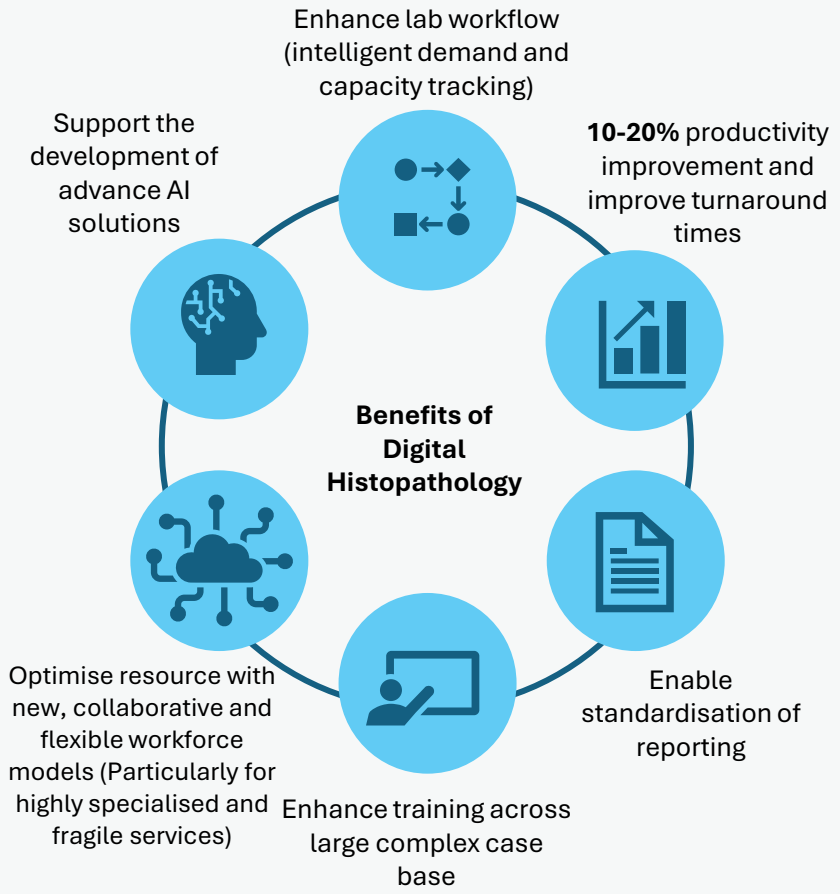
What is Digital Histopathology?

- Digital histopathology is the application of advanced digital technology to create, view, and analyse high-resolution images of tissue samples that would traditionally be examined under a microscope. In this process, biological specimens on physical glass slides are scanned using specialised digital scanners, transforming them into detailed digital images.
- These digital slides (or Whole Slide Images) can then be reviewed and interpreted on computers or other digital platforms, enabling pathologists to diagnose diseases—including cancers—using a combination of traditional expertise and modern digital tools.

Why is it a priority?

- Digital histopathology offers significant advantages to pathology services, enhancing collaboration and enabling remote consultations.
- By bridging geographical gaps, it connects scarce, highly specialised expertise, ensuring service resilience and expanding training and development opportunities.
- This technology also fosters innovative ways of working, strengthening histopathology services for the future.

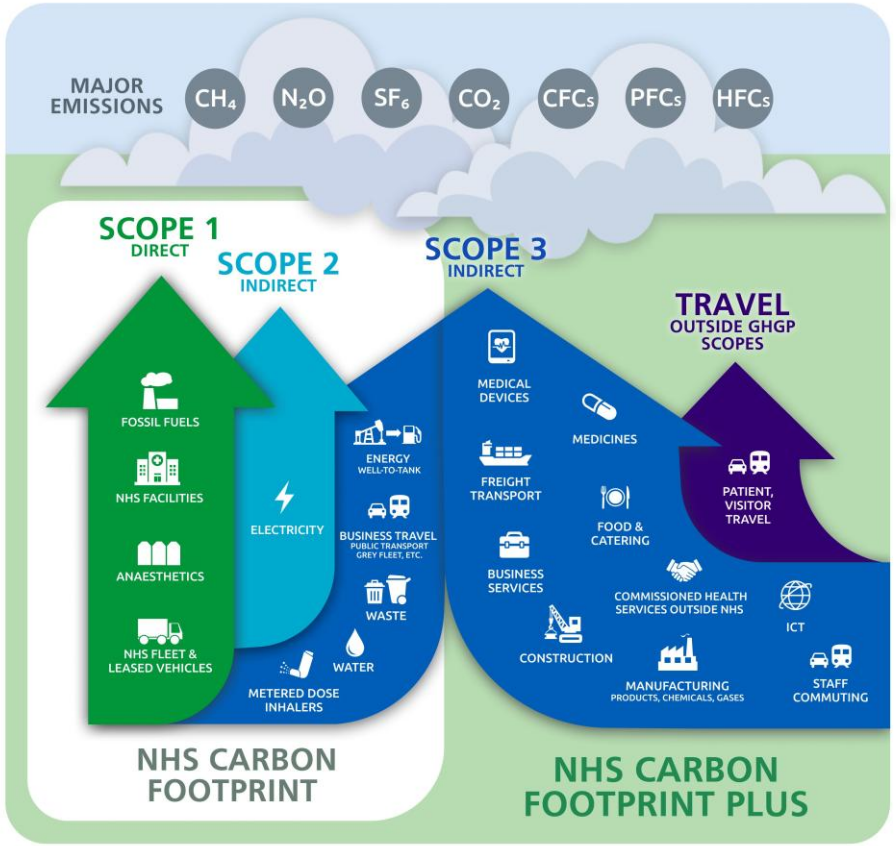
Progress? Over £150m has been invested across all 27-pathology network to implement digital histopathology to enhance productivity. Implementation is underway across all networks, with some services using digital histopathology for over 90% of cases.

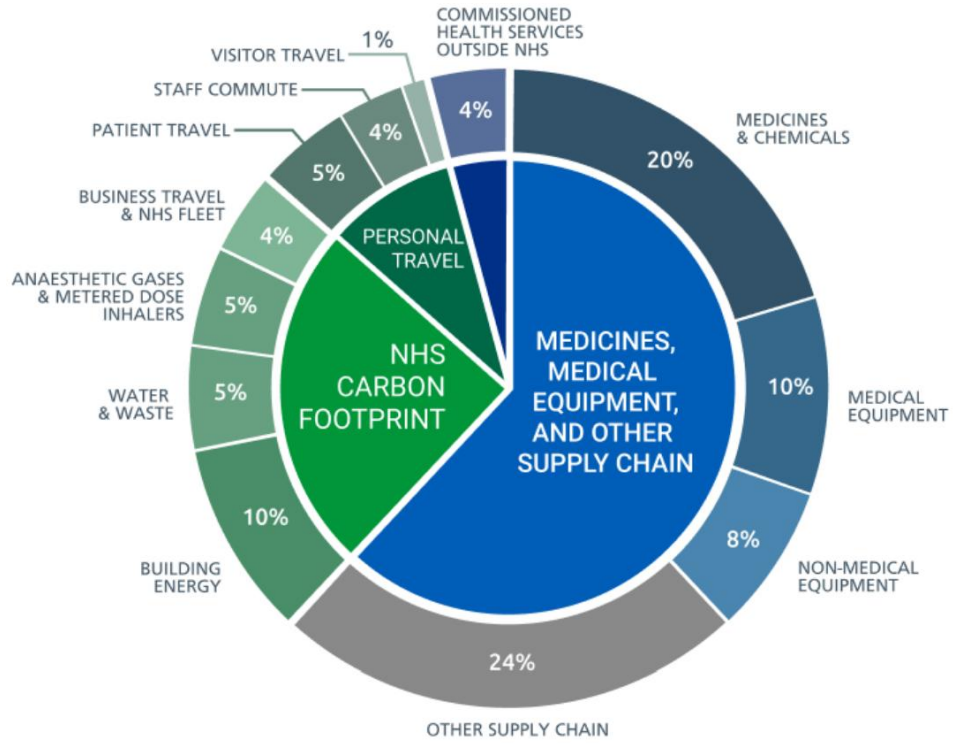


The NHS was the world's first health service to commit to net zero

The NHS is responsible for around **5%** of UK emissions and as the largest employer in the UK (**1.4 million staff**), accounting for **over 2% of UK population** we can make a real difference. In 2020 the NHS committed to be:

- **Net zero for emission we control directly by 2040**, ambition to reach an 80% reduction by 2028 to 2032
- **Net zero for emissions we can influence by 2045**, ambition to reach an 80% reduction by 2036 to 2039





A greener future for pathology: work to date

Developing awareness to drive change: **‘How Green is Your Lab’ event**

Hosted by The Royal College of Pathologists in London, NHS England Pathology and Greener NHS supported by professional bodies, hosted a “How Green is Your Lab?” event bringing together change-leaders to discuss, debate, and ultimately come together in recognising opportunities to integrate sustainability into pathology.

For a recording of the event, papers and other supportive resources, please visit our NHS Futures Page: https://future.nhs.uk/Pathology/view?objectID=49464912

A greener future for pathology: work to date

- Building sustainability into the Pathology Network maturity self-assessment.

1. Governance
2. Leadership
3. Operational
4. Quality
5. IT & Digital
6. Workforce
7. Shared Supply Chain

Sustainability embedded across all 7 domains

- 85% response rate across the 27 pathology networks
- 50% of respondents say they intend to work towards one or more sustainability actions listed in the matrix

Building reference materials and resources
Sept 2024 - ongoing

Develop a library of case studies showcasing how pathology services have successfully implemented environmental sustainability initiatives, enabling shared learning and best practice across pathology services in England.

Chief Sustainability Officer's Clinical Fellow
Sept 2024 - ongoing

Develop a resource to support sustainable practice in clinical labs

Support clinical labs to measure and reduce carbon emissions

Faculty of Medical Leadership and Management
NHS
Chief Sustainability Officer's Clinical Fellow Scheme
NHS England
UKRI Medical Research Council

Why Go Green

Economic Benefits:

Cost Savings:

- Implementing energy-efficient equipment and waste management systems can lead to lower utility bills and reduced operational costs.

Increased Efficiency:

- Sustainable practices can streamline workflows, improve efficiency, and potentially save time and resources.

Competitive Advantage:

- Demonstrating a commitment to sustainability can attract environmentally conscious clients and partners, improving a lab's reputation.

Regulatory Compliance:

- Adopting green practices can help labs comply with environmental regulations and avoid potential penalties.

Other Benefits:

Improved Health and Safety:

- Green practices can create a healthier and safer environment for lab personnel by minimizing exposure to hazardous materials and improving air quality.

Enhanced Reputation:

- A commitment to sustainability can enhance a lab's reputation and contribute to a positive public image.

Future-Proofing:

- As environmental regulations become stricter, labs that prioritize sustainability will be better prepared for the future.

Promoting a Culture of Sustainability:

- Green initiatives can foster a culture of environmental responsibility among lab staff, encouraging them to adopt sustainable practices in their daily work

Environmental Benefits:

Reduced Carbon Footprint:

- Laboratories are energy-intensive workplaces, and going green helps reduce greenhouse gas emissions and combat climate change.

Waste Reduction:

- Sustainable practices, like reducing, reusing, and recycling lab supplies, can significantly minimize waste generation, including hazardous waste.

Resource Conservation:

- Green labs focus on minimizing water and energy consumption, leading to a more sustainable use of resources.

Chemical Management:

- Responsible handling and disposal of chemicals are crucial for preventing pollution of air, water, and soil.

How To Go Green

Go Green in the lab

- Reduce wasteful ordering
- Order from sustainable suppliers

Cut your energy usage in the lab

- Switch off lights and appliances
- Install a timer
- Altering equipment settings
- Check your freezers
- Close the fume hood
- Power down computers at night

Stop Plastic Waste

- Use glassware
- Re-use boxes a
- Re-use pipette tips
- Re-cycle as much as possible

Water Usage

- Always turn off taps properly
- Switch from water baths to bead baths
- Responsibly dispose of chemicals

Greener Clinical Labs

Project Aim:

To develop a resource that:

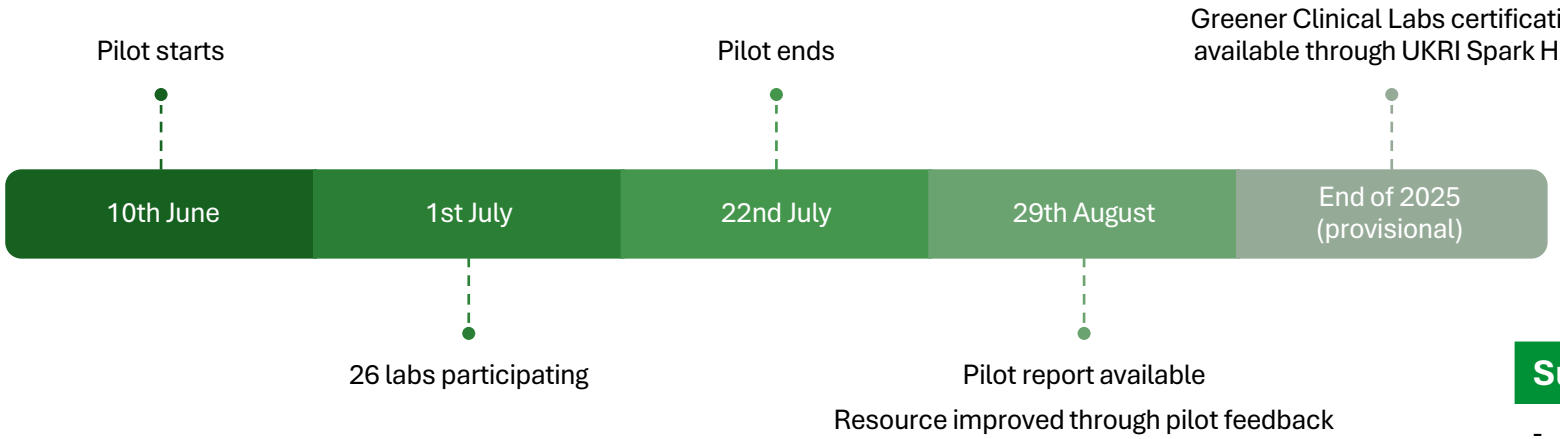
- supports **clinical labs that provide NHS services** to improve their environmental sustainability
- publicly recognises the progress labs have made through **certification**

The resource so far...

Recommended actions for clinical labs to take to improve environmental sustainability

Pilot Aim:

To test the recommended actions with clinical labs



Supported by:

- UKRI
- Greener NHS
- NHSE Pathology Transformation
- Peninsula Pathology Network

Ashling Coakley-Burns, Chief Sustainability Officers Clinical Fellow: Ashling.coakley-burns1@nhs.net

Dr Ashling Coakley-Burns

Clinical Fellow, Peninsula Pathology Network

Chief Sustainability Officers Clinical Fellow 24/25

Resilience

By implementing some key steps, labs can build a strong foundation of resilience, enabling them to navigate challenges effectively, maintain productivity, and continue to thrive in the face of adversity.

Building a Resilient Team and Culture:

- **Foster open communication:**
    - Encourage open dialogue about challenges, successes, and areas for improvement within the lab.
- **Promote teamwork and collaboration:**
    - **Build a culture where team members support each other, share knowledge, and collaborate effectively.**
- **Acknowledge and appreciate contributions:**
    - Recognize and appreciate the efforts of lab members to boost morale and motivation.
- **Develop a growth mindset:**
    - Encourage a mindset that views challenges as learning opportunities and failures as valuable experiences.
- **Provide regular feedback:**
    - Offer constructive feedback to help team members improve and build confidence.
- **Address individual needs:**
    - Be mindful of individual circumstances and provide support for stress management and well-being.

Developing Individual Resilience:

- **Stress management techniques:**
    - Equip team members with practical tools for managing stress, such as time management strategies.
- **Seek support when needed:**
    - Encourage team members to seek help from colleagues, supervisors, or relevant resources when facing challenges.
- **Reflect on past experiences:**
    - Encourage reflection on past challenges to identify what worked well and what could be improved in the future.
- **Build positive relationships:**
    - Strong social connections can provide a valuable support network during difficult times.
- **Maintain a healthy work-life balance:**
    - Encourage adequate sleep, exercise, and time for personal activities to prevent burnout.

Implementing Robust Operational Practices:

- **Risk assessment and contingency planning:**
    - Regularly assess potential risks to the lab and develop backup plans for critical equipment and data.
- **Regular maintenance and system checks:**
    - Ensure all equipment and systems are in optimal working condition to minimize potential disruptions.
- **Standardized procedures and workflows:**
    - Establish clear guidelines and procedures to ensure consistency and minimize errors.
- **Invest in redundancy:**
    - Implement backup systems for critical equipment and data to ensure business continuity.
- **Adaptability and flexibility:**
    - Be prepared to adapt to changing circumstances and adjust protocols as needed.
- **Embrace technology:**
    - Utilize technology to streamline workflows, improve communication, and enhance data management.

Crisis Management

- Effective lab crisis management involves proactive planning, clear communication, and a well-defined response strategy.
- This includes identifying potential crises, establishing clear communication channels and chain of command, and conducting regular drills to test the plan.
- Crucially, a post-crisis debriefing is essential for learning and improving future responses.

Crisis Management

Preparation and Prevention

- Identify Potential Crises
- Develop a Comprehensive Plan
- Establish Clear Roles and Responsibilities
- Practice and Train
- Maintain Resources

Crisis Management

Communication is Key

- Designated Communication Channels
- Clear and Concise Messages
- Regular Updates
- Transparency and Honesty
- Two-way Communication

Crisis Management

During a Crisis

- Follow the Plan
- Prioritize Safety
- Contain the Situation
    - Locally
    - More widely
- Document Actions

Crisis Management

Post-Crisis

- Debrief and Evaluate
- Update the Plan
- Restore Operations
- Communicate Recovery Efforts

Recently introduced Post-Market Surveillance regulations requires manufacturers to establish a process for communicating effectively with the Secretary of State (i.e. MHRA), the UK Approved Body for the device (if there is one), the UK responsible person (if there is one), users (such as the NHS) and suppliers of the device

The Medical Devices Regulations 2002

What Version
✓ Latest available (Revised)
Original (As made)

Advanced Features
Show Geographical Extent
(e.g. England, Wales, Scotland and Northern Ireland)
Show Timeline of Changes

▼ Opening Options
▼ More Resources

Changes over time for: Section 44ZF

17/06/2025

Changes to legislation:
The Medical Devices Regulations 2002, Section 44ZF is up to date with all changes known to be in force on or before 25 June 2025. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations.

▼ View outstanding changes

[F1 Post-market surveillance plan

44ZF.—(1) The manufacturer must base the post-market surveillance system on a post-market surveillance plan ("PMS plan") that complies with this regulation.

(2) A PMS plan must be—

(a) clear, organised and searchable, and

(b) maintained for the PMS period of the device model.

(3) A PMS plan must specify the lifetime of the device and must include—

(a) processes for the collection and assessment of the following information in relation to the device—

(i) information about serious incidents, other incidents and side-effects;

(ii) information about field safety corrective actions;

(iii) information for the purposes of identifying trends in incidents and if applicable, reporting those trends under regulation 44ZN (trend reporting);

(iv) feedback and complaints provided by users and suppliers of the device;

(v) information about user experience in relation to safety and performance, including through patient and public engagement, where appropriate;

Thank You

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Panel Discussion

Saghar Missaghian-Cully
Managing Director
North West London Pathology

Debra Padgett, MSc, MA, FIBMS, CSci
Clinical Pathology Service Manager / Operational Lead, Institute of Biomedical Science / Northumbria Healthcare NHS Foundation Trust / North East & North Cumbria

Francesca Trundle
Managing Director
Kent and Medway Pathology Network

Dr Bernie Croal
President
The Royal College of Pathologists

NHS
North West London Pathology

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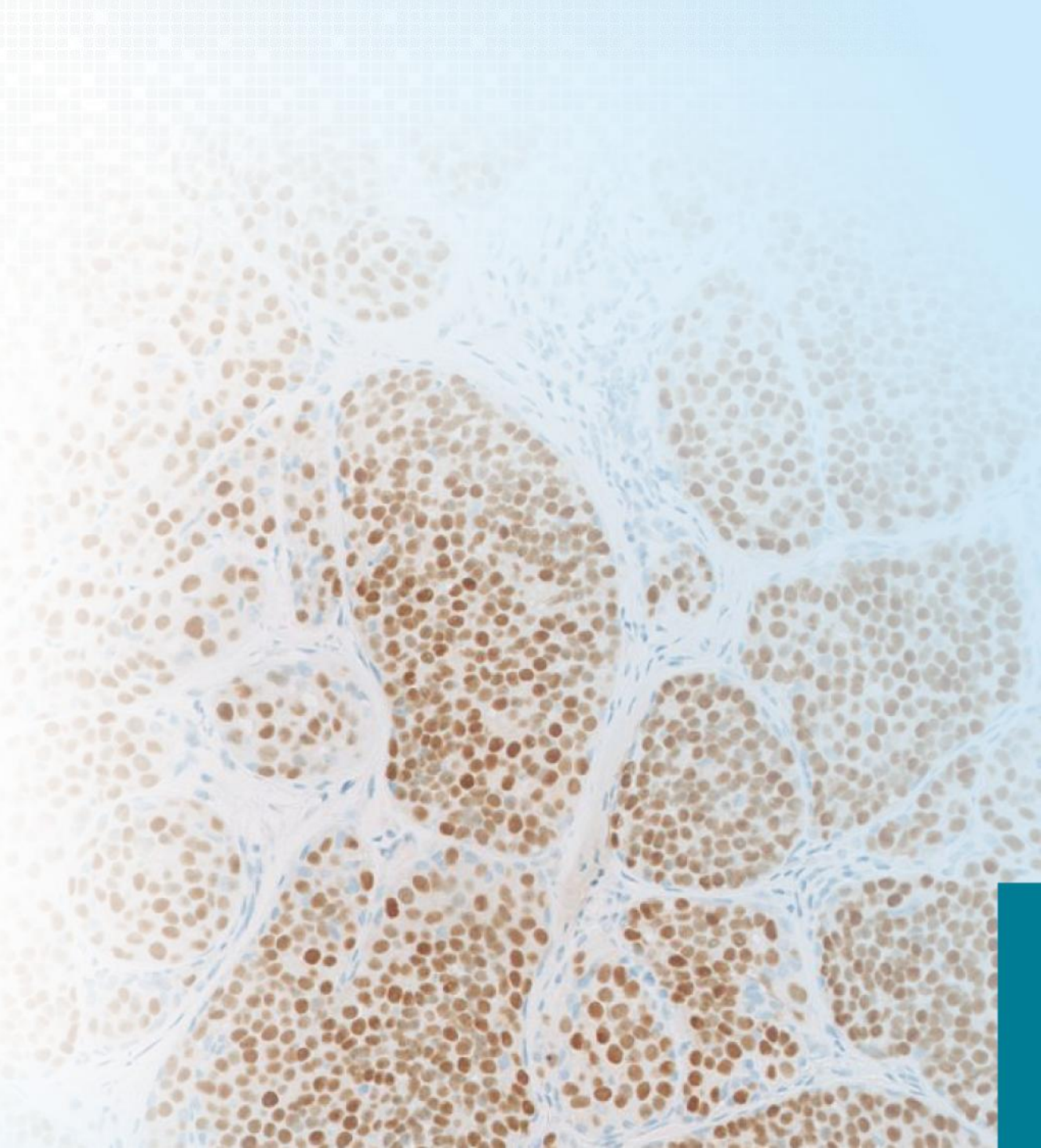
Learnings from Digital Pathology Integrations



A bit of history

1. Since 2014
2. LDPath merged with Source BioScience to form Source LDPath
3. First of its kind integration with EKHUFT
4. Multiple, different varieties of integrations underway currently

Source LDPath

Proven Expertise achieving average 90% KPI compliance for TATs

Scanning over 1.5 million slides per year

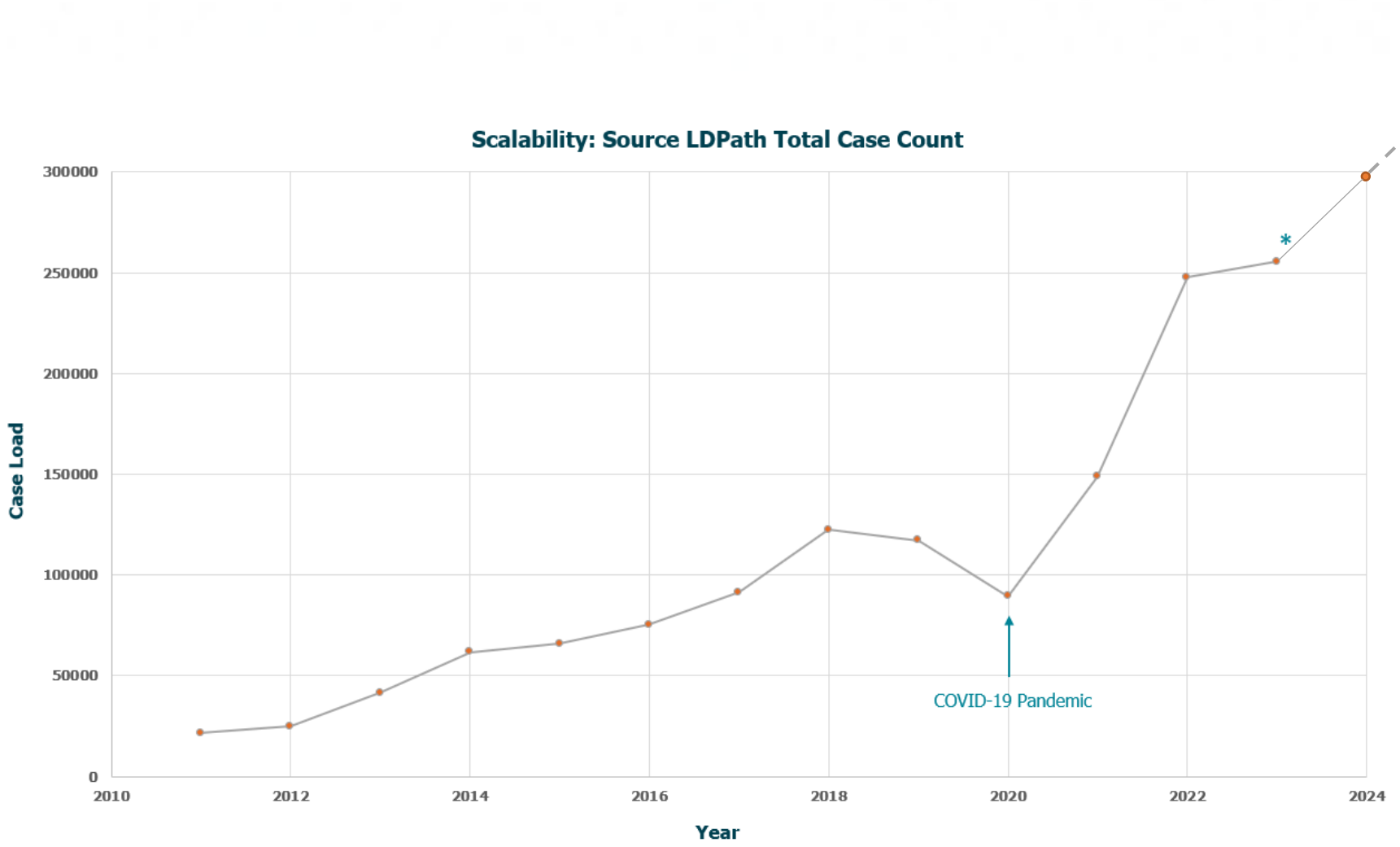
280+ Consultant Pathologists

15189:2022 UKAS accredited

Support over 90 NHS Trusts

300k+ cases reported & 1.5 million+ slides scanned last 12 months

Demonstrated Growth and Scalability



Over 300k cases in 2024

* 2023 – a year of internal development including the build and launch of our bespoke LIMS (HIVE LIMS+™) and facility expansion with our new Chichester laboratory.

Source LDPath

2 self sufficient, accredited laboratories (North and South) to support requirements, ensure no downtime in your service, and provide **business continuity and disaster recovery**

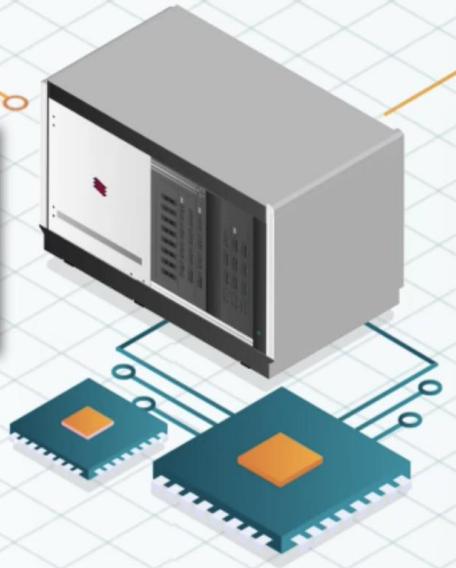
Nottingham

Cambridge*

(Genomics only)

Chichester

Experts in Digital Pathology Integrations



Source LDPath offers modular flexibility, allowing customisation depending on the needs of the Trust or laboratory

FLEXIBLE SOLUTIONS

Learnings

What is our starting point?

What will get us to the finish line?

What type of integration is required?

What is our definition of success? (case studies)

Learnings

What is our starting point?

What is your set up? (this list is not exhaustive!)

1. What are your scanners?
2. What LIMS do you use? What version?
3. What IMS do you use?
4. Current sending patterns e.g. Wets, Pre-prepared?
5. Do you require more help with specific specialities?
6. Which pathology network are you part of?
7. How many in house staff do you have?
8. Are there specific clinics you run?

Clinisys
WinPath

Learnings

What is our definition of success?

Success

Current and target TATs

Pathology network integration

NHS 10 year plan

What is our target patient population

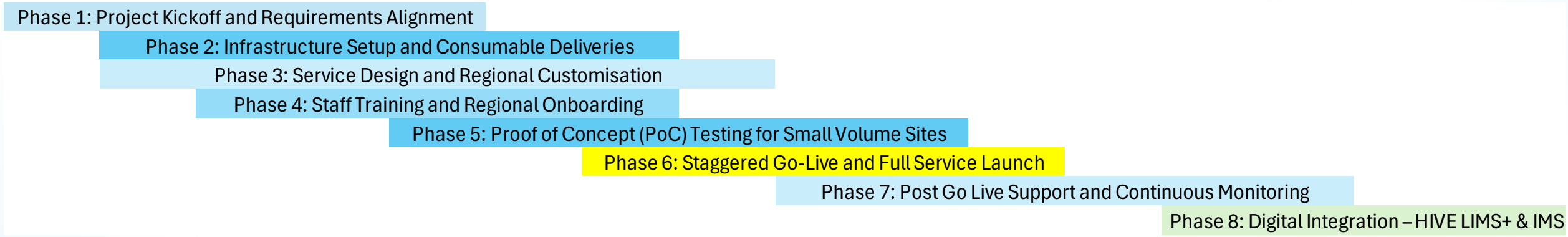
Etc…

Learnings

How are we going to get to the finish line?

Getting You Digital: Eight Phase Implementation Plan

- Detailed plan shared as part of the tendering process, includes 8 key phases from initiation to digital integration
- Experience in delivering highly complex integrated customised services
- Experience in scaling without compromising service delivery



Learnings

What type of integration will this be?

1

Digital Integrations

Source LDPath – Leaders in Digital Pathology & AI

1. LIMS-to-LIMS

Bridging connectivity within and between hospitals with custom solutions for system integration.

Source HIVE™ - built by pathologists, for pathologists.

Source LDPath

Digital Integration Modules

2. Scanning

Digital imaging directly to Source LDPath or by Source LDPath.

Source LDPath has consultant pathologists in every discipline for rapid reporting of digital images.

2

Digital WSI- Image Acquisition (Philips Conversion)

Scanner to Scanner

Digital Image Transfer to Source LDPath

We support direct image transfers and can convert files into the relevant format.

Images can be transferred via:

File Push Model (†): Direct transfer of images to us.

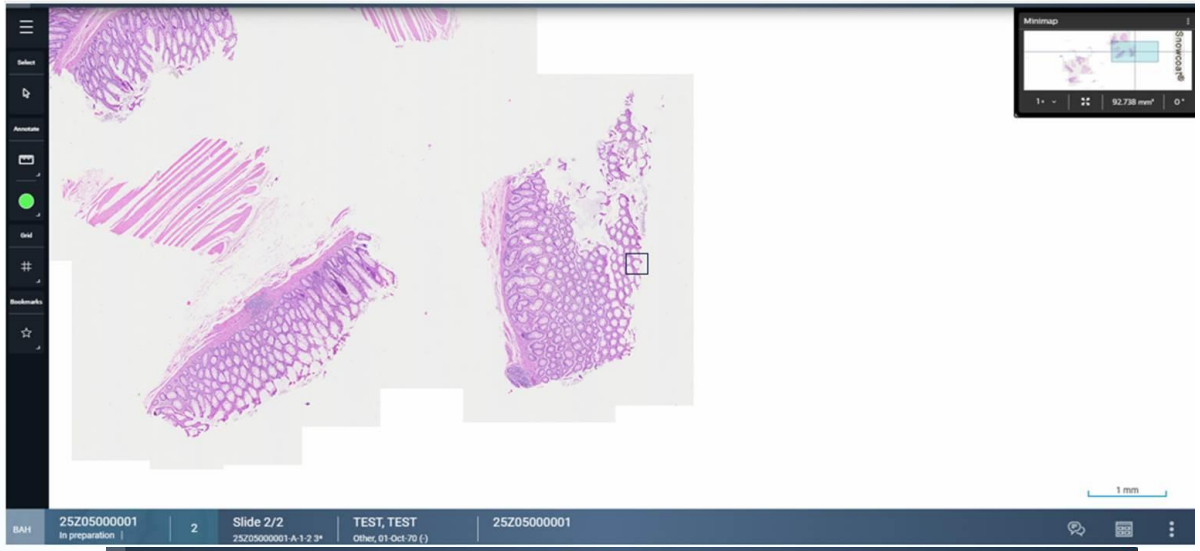
File Pull Model (††): Retrieval of images from a secondary location.

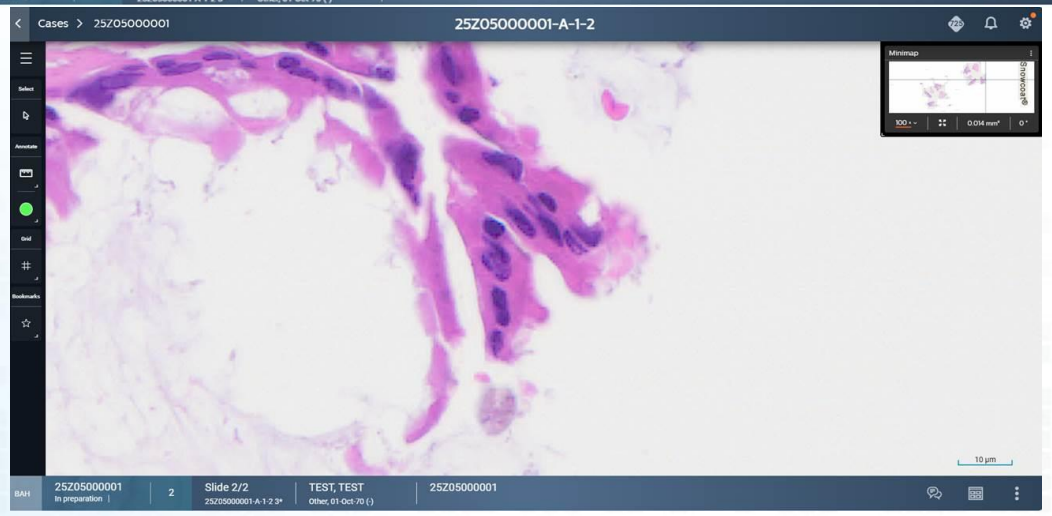
Scanner Agnostic: We accept images from all scanner types directly.

Scanner	Image Format
Hamamatsu	NDP Image files
3D Histech	mrxs
Philips	iSyntax v2 iSyntax v1
Glissando	svs
Leica	svs
KFBIO	svs
Roche - Ventana Scanners	Roche TIFF
Sectra	WS DICOM
Others	JPEG JPEG200 BMP TIFF

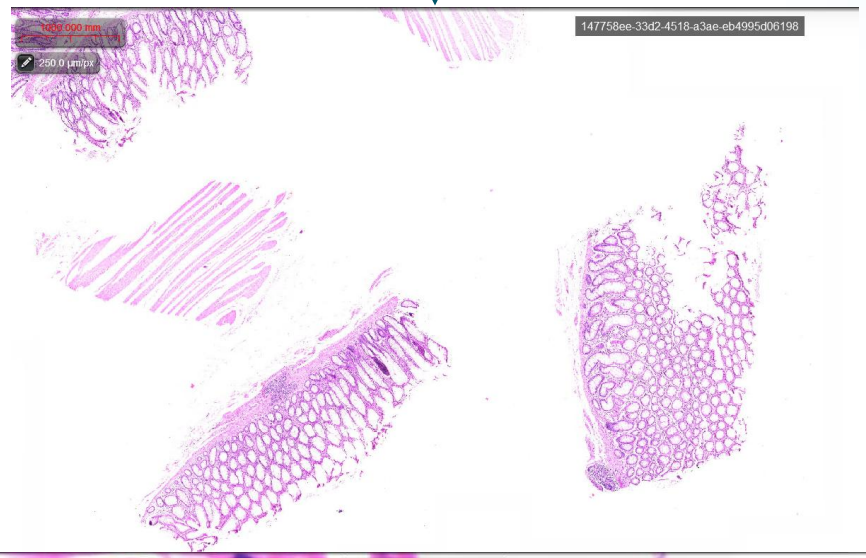
Conversion Tool

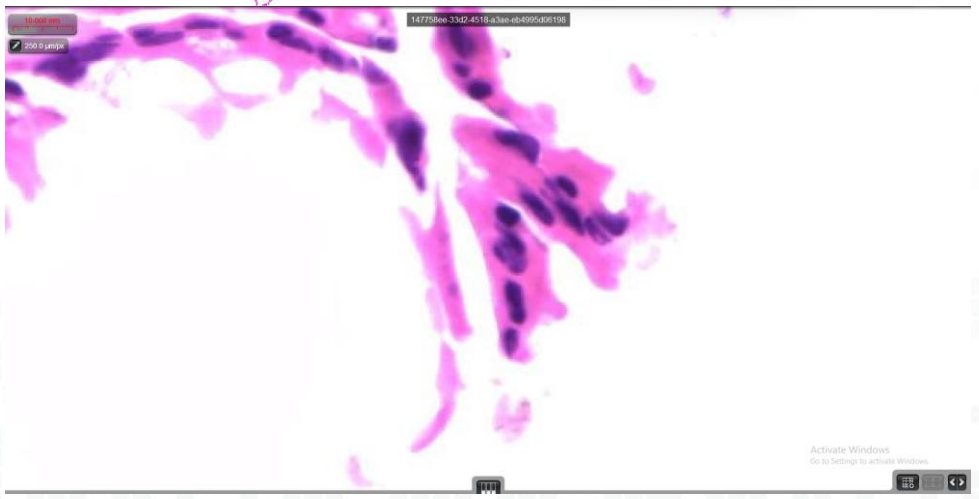
Philips IMS





3DH IMS





Benefits to the Trust

Faster turnaround times (TATs)
Scanned WSI are sent directly to Source LDPath for analysis by our validated digital reporting pathologists.

Making results easier to interpret
Digital pathology simplifies result sharing and enables second opinions. It also improves access to images for discussion during MDTs.

Supporting NHS Cancer Targets 2025
The NHS aims to utilise digital pathology to enhance the analysis of cancer samples, improving diagnostic accuracy and efficiency.

Reducing the risk of sample loss or damage
Digital pathology removes the need for pathologists to be physically present in hospitals, eliminating the risk of sample loss or damage during transit.

Image Storage and Archiving

Digital images are stored for a minimum of 8 years

- Any reported digital images remain on our primary servers (accessible at any time) for 3 months from the report date. This ensures sufficient time for cases to be re-opened or discussed at MDMs.

- Digital images between 3 months and 1 year old are moved to intermediary storage, where retrieval can take up to 5 minutes.

- Digital images between 1 and 8 years old are stored in deep glacier storage, where retrieval may take between 1 and 12 hours.

3

LIMS-to-LIMS WinPath Plugin

Winpath Plugin

LIMS-to-LIMS Integration

Seamless connection between Source LDPath and Trust LIMS for streamlined case information transfer.

- **Quick and easy** assignment of cases to Source LDPath.
- **Faster case management**, enabling efficient allocation to Source LDPath reporting pathologists.
- **Reduced administrative burden**—direct access to reports within WinPath.

Next Steps

- Trust's Clinisys Representative: Trusts should express interest in integration.

Integration Types

- **Type I:** Without preliminary reports (Final Report Only) – ready to go live in Q1 2026.
- **Type II:** With preliminary reports and automated report authorisation – go-live date TBC.

clinisys™

4

Third Partner Integrations

FujiFilm Integration

This allows us access the Fujifilm Cloud- so images can be obtained more easily rather than a manual approach.

Advantages:

- Quicker referral of cases to be outsourced
- Slides and patient information sent together

FUJIFILM

5

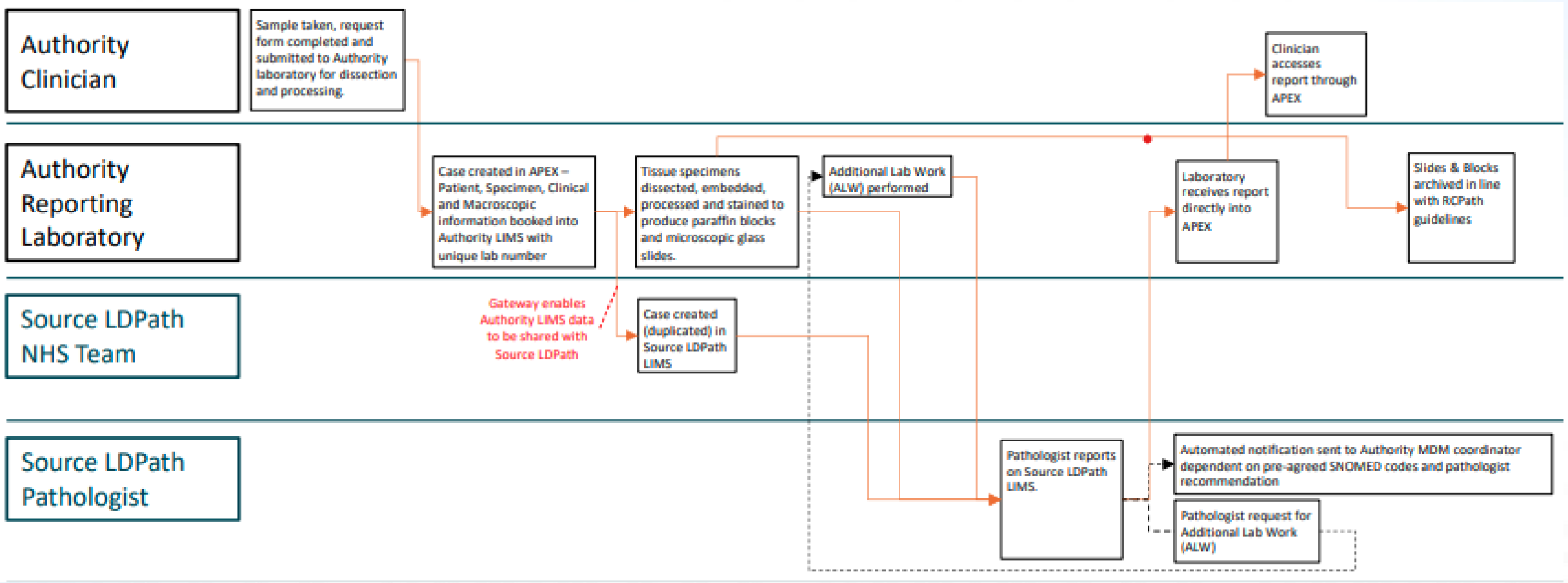
LIMS-to-LIMS

APEX LIMS to LIMS Integration
East Kent Hospital NHS Foundation Trust (EKHUFT)

LIMS Integration:

- ✓ **Enables seamless transfer** of cases between Source LDPath and the Trust.
- ✓ **Faster turnaround times** (TATs)—eliminates the need for shipping slides and request forms.
- ✓ **Improved case tracking**—all information is stored in LIMS, ensuring a full audit trail.
- ✓ **Simplifies case management** for Second Opinions (SO) and MDT support.

APEX LIMS to LIMS Integration
East Kent Hospital NHS Foundation Trust (EKHUFT)



6

What could this mean for you?

Case Study 1: Direct Integration LIMS-to-LIMS

Capabilities:

- Outsource patient cases directly via hospital LIMS
- Reports returned to LIMS at point of authorisation

Coverage:

- 11,000+ cases reported in 2024
- 9 Specialities, 60 Consultant Histopathologists

TATs:

- 90% reported within 5 days, including additional cases
- Hospital preferences: authorisation queue or auto-authorised
- 20% increase in outsourced cases post- integration
- Reduced from 9 to 5 days from procedure to outsourcing

- **Requirements:**
- Same SNOMED version, no conversion needed
- Locally adapted datasets, as if reported in-house

Case Study 2: Scanning

Capabilities:

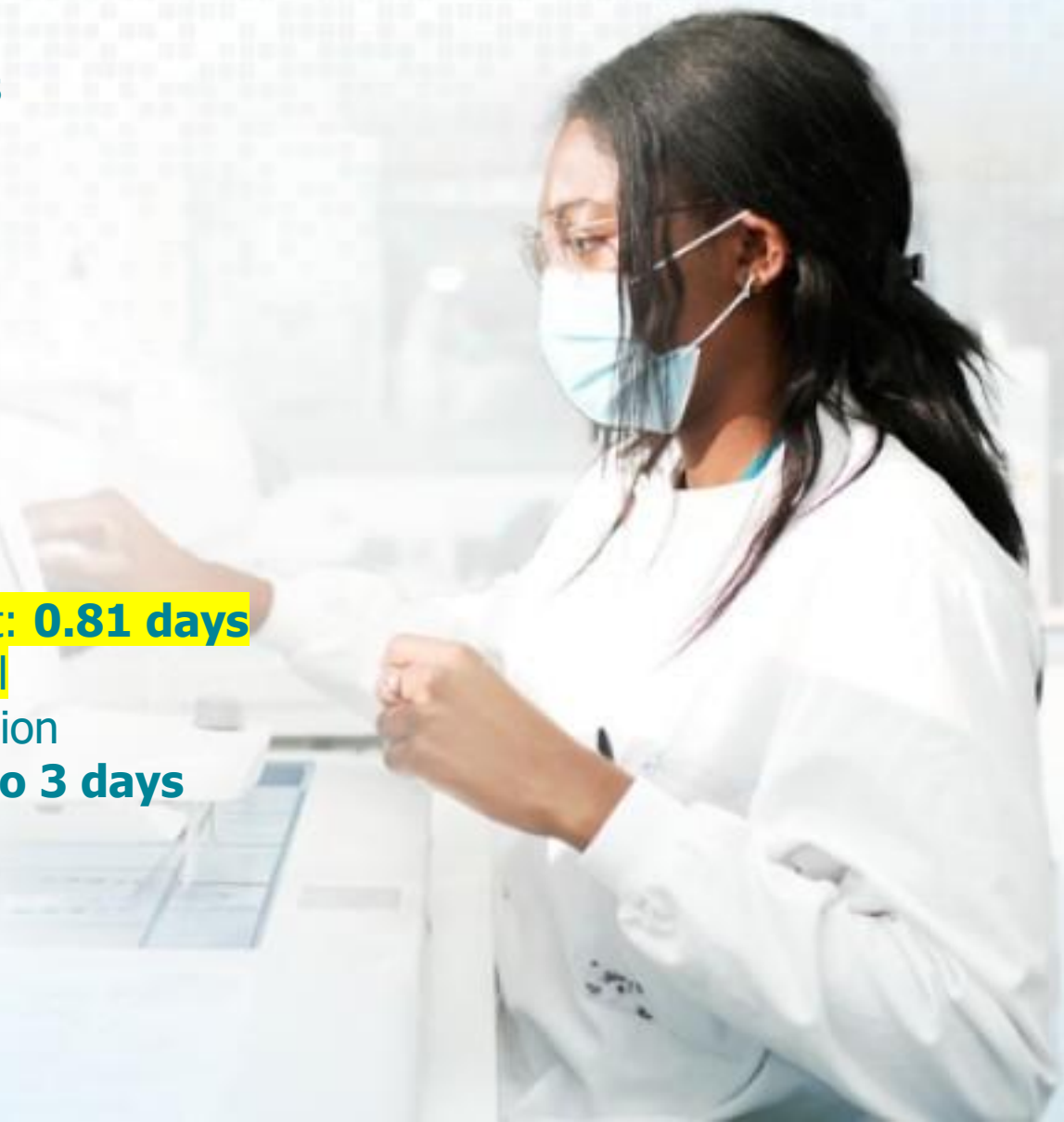
- Slides scanned directly from NHS to our servers
- Ingested into SLDP IMS with out conversion
- Received via 3DHistech P1000 Scanners
- Linked to patient records in SLDP LIMS via HL7

Coverage:

- 6,000+ cases reported in 2024
- 7 Specialities, 2 Consultant Histopathologists

TATs:

- Average TAT from scanning to SLDP pathologist: **0.81 days**
- 92% reported within 5 days including additional
- 30% increase in outsourced cases post-integration
- Procedure to outsourced time reduced from **7 to 3 days**



Case Study 3: LIMS-to-LIMS & Scanning

Capabilities:

- Direct LIMS-to-LIMS integration
- Slides scanned from NHS to our servers
- Case selection via hospital LIMS
- Final reports sent directly to LIMS at authorisation (no provisionals)
- Custom configuration to only receive final reports (no provisional reports sent)
- SNOMED and local datasets aligned-no conversion needed

Coverage:

- 14,000 + cases reported in 2024
- 5 Specialities, 42 Consultant Histopathologists

TATs:

- 90% reported within 4 days, including additionals
- Average TAT from SLDP receipt was **2.86 days**
- 166% increase in outsourced cases post-integration
- Procedure-to-outsource time **reduced from 18 days to 4 days**

8

Added benefits

Multi Disciplinary Meetings (MDMs)

HIVE LIMS+ allows us to:

- Send notifications to relevant users (e.g. clinicians, administrators, MDM coordinators) for cases necessary to discuss at MDM
- Send notifications for cases with unexpected diagnosis to relevant users e.g. clinically benign, histologically malignant cases
- Send notifications for cases that have been pre-agreed to be discussed at MDMs based on the SNOMED codes used in reports

Source LDPath have over **280 pathologists covering all specialties'** and are therefore able to:

- Provide a list of cases which require discussion (with any additions as necessary from consultants)
- Provide the digital images for the associated cases (as the original reporting pathologist may not be the pathologist reviewing and discussing at the meeting)
- Provide a pathologist to join the MDM

Source LDPath

"We are really pleased with the service you provide and I look forward to continuing our working relationship."

Laura Thomas

Anatomical Pathology Technician

sourcebioscience.com

Source LDPath

Contact the Team

sourcebioscience.com
enquiries@sourcebioscience.com

SCAN TO VISIT WEBSITE

Refreshments & Networking

NHS
North West London Pathology

CONVENZIS TRAINING

Please scan the QR Code on the screen below to register your interest for our accredited training courses.

Chair Morning Reflection

Saghar Missaghian-Cully
Managing Director
North West London Pathology

NHS
North West
London Pathology

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Case Study

ProfilerLive

NHS
North West
London Pathology

Case Study

Simon Brown
Director
ProfilerLive

NHS
North West
London Pathology

Digitising Staff T&C

The first step in unlocking workforce potential

Simon Brown
Director

1st July 2025

Who are we

UK business, customers in Healthcare, Financial Services,
UK Utilities and users across Europe

NHS

Deployed at scale in Pathology networks

ProfilerLive

We work collaboratively

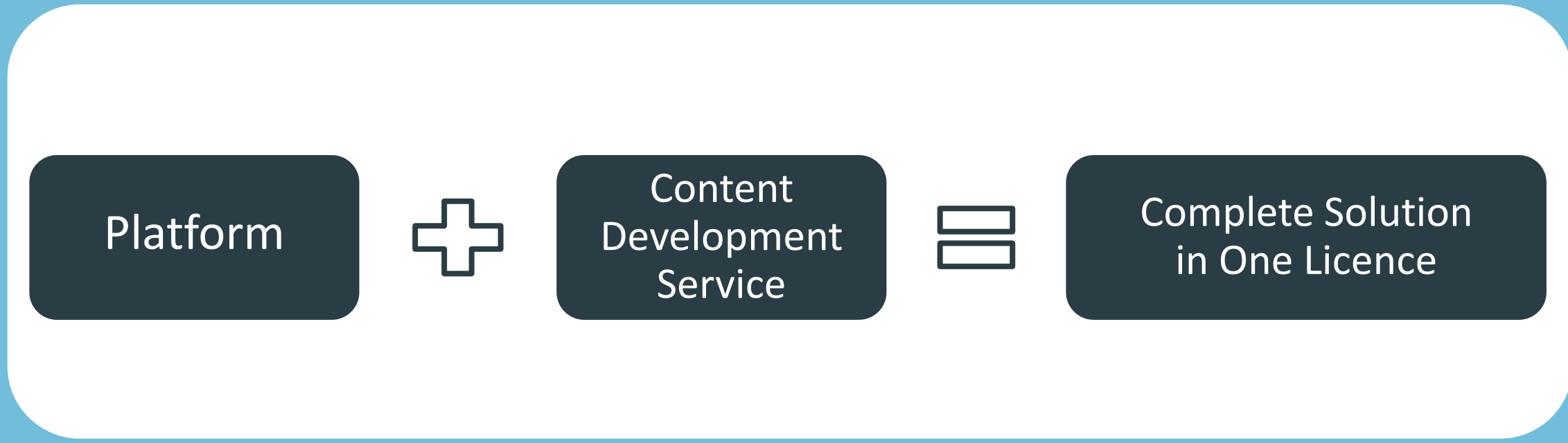
Your
technical knowledge
& understanding

ProfilerLive
expertise, tools
& experience

Digitising Staff T&C

The first step in unlocking workforce potential

How we do it



We enable productivity upsides worth £millions with fast payback

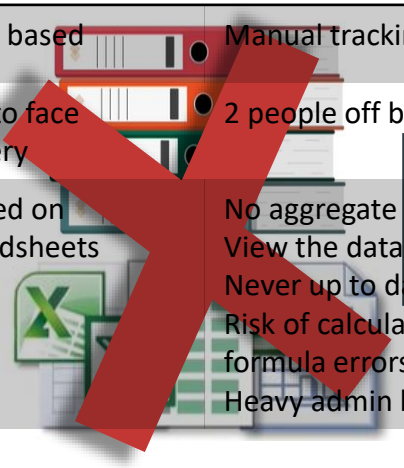
ProfilerLive

ProfilerLive

What changes

From …
Paper & spreadsheets

Characteristic	Implication
Paper based	Manual tracking
Face to face delivery	2 people off bench
Tracked on Spreadsheets	No aggregate picture View the data one-way Never up to date Risk of calculation & formula errors Heavy admin burden



To …
Real-time continuous digital process

Productivity

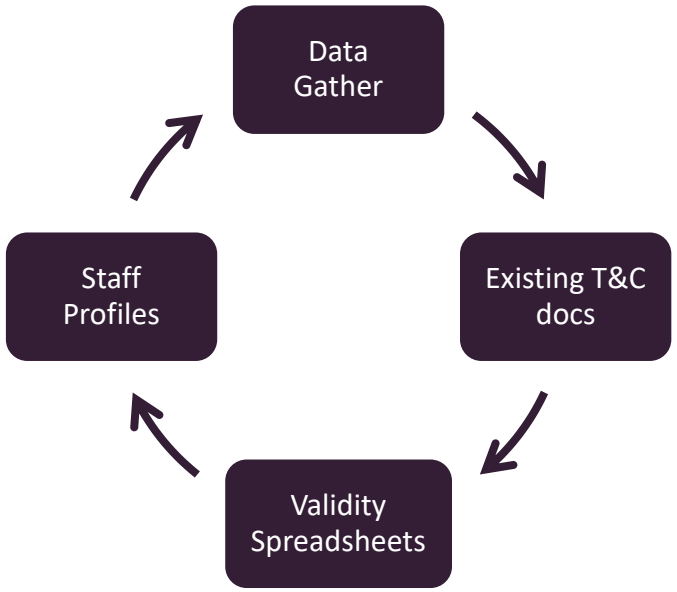
Governance

Real Time Visibility

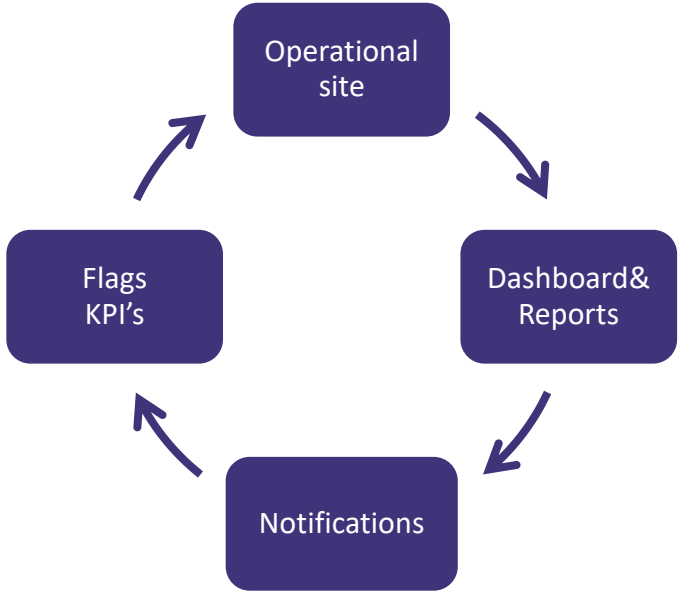
ProfilerLive

3 step launch

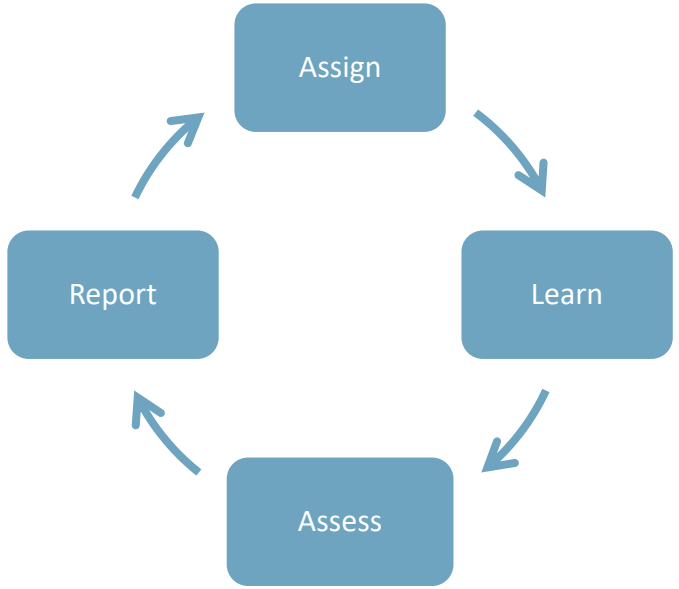
Step 1 Import



Step 2 Staff Launch



Step 3 Operate



ProfilerLive

Then … data optimisation

1. **Competency Status**
2. **Competencies by Bench – ‘Skill Sets’**
3. **Staff T&C Risk Based Priority**
4. **Time Required for Staff to complete T&C**

Integrated Insights
& Gap Analysis

Ranked list of actions:
Every Person - Every Bench

1. What competencies in what sequence, by who
2. How long they need to finish!

Real time insights enable data led decision making at every level of the organisation

ProfilerLive

Staff/management feedback

LOVE the lapsed training page … makes it **easy** to address specific staff

It's not just T&C … ProfilerLive is an enabler to so much more, it's truly ***transformational***

UKAS really like what we are doing with ProfilerLive

We worked with ProfilerLive to build all the T&C content to support the 5 user roles on our new Document Management system

Within 14 weeks of project start 80% of staff across the network are valid– just amazing!

Goodbye paper!

We have **never** seen anything like this before … It's **amazing**, and so simple to use

Staff really like it .. It's **faster** and **easier** than our old process

Great reports … so **EASY to use**!

We have so many areas **outside** of technical T&C where we want to use **ProfilerLive**

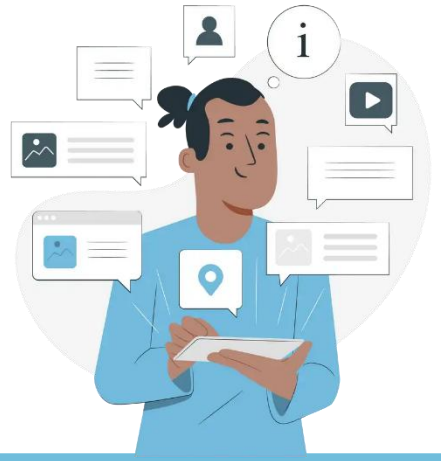
So excited about the work **ProfilerLive** are doing with us **transforming** Training & Education, it's a **key enabler**

***ProfilerLive** is just what we need … the more you use it the better it gets!*

ProfilerLive

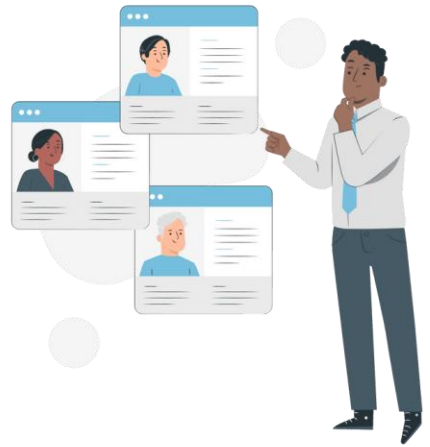
Core benefits delivery

Productivity



Visibility

Governance



A transformative evidence-based Training & Competency solution

ProfilerLive

Digitisation systematises change

Comprehensive toolkit & support, to navigate the constant change at every level of your organisation

Transitions

- **New** equipment
- **New** ways of working
- **New** software
- Harmonisation
- **New** location

Steady State

- **More for less**
- New regulations
- **Act Now**
- CPD / CI

Staff changes

- **Starters**
- Movers
- **Leavers**
- Locums/banks

Every network is navigating ongoing change at multiple levels.
It’s not one project. It’s a continuous state.

What is Your enabler ?

Your network's investments will only deliver value if your people are ready and have the support they need.

ProfilerLive connects

>>> your people to your systems,

>>> your plans to your delivery.

ProfilerLive

Turning isolated improvements into a cohesive, integrated model.

In conclusion:

You’re already doing the hard part - **together** we will **make it easier**

Systems matter. But people deliver.

Systematising 'people change' unlocks the value of all your other investments.

ProfilerLive helps ensure your workforce can keep up - with structure, visibility & assurance.

ProfilerLive

Turning isolated improvements into a cohesive, integrated model.

Let’s talk!

Want to explore how this could work in your network?

We’re here to listen, show, and support.

Visit the stand or book a session with us.

ProfilerLive

Turning isolated improvements into a cohesive, integrated model.

Digitising Staff T&C

The first step in unlocking workforce potential

Simon Brown
Director

6th February 2025

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North West London Pathology

ONVENZIS

Case Study

Scopio

NHS
North West
London Pathology

Case Study

Vassan Thavarajah
Operations Manager, Blood Sciences Laboratories
Synnovis

NHS
North West
London Pathology

Scopio

Scopio’s Digital Cell Morphology Technology

Bringing full-field digital imaging and the power of AI
to hematology & hematopathology labs around the world

DMS- 45656 Rev A

Opposing Trends in Lab Sciences

Staffing is DOWN

73%

of U.S. medical laboratory are **severely** or **moderately understaffed**

16.7%

Anticipated retirement in the next 5 years in the Hematology labs of U.S

Demand is UP

2020
2030

40%

Expected increase of the global population **aged 60+**

2010
2019

26%

Increase in **cancer diagnosis** worldwide, leading to **more blood testing**

Sources: *2022 Wage and Morale Survey of Medical Laboratory Professionals (Lighthouse Lab Services, 2022), "Cancer Incidence, Mortality, Years of Life Lost, Years Lived With Disability, and Disability-Adjusted Life Years for 29 Cancer Groups From 2010 to 2019" (JAMA Oncology 2022), Ageing and Health (World Health Organization, 2022)*

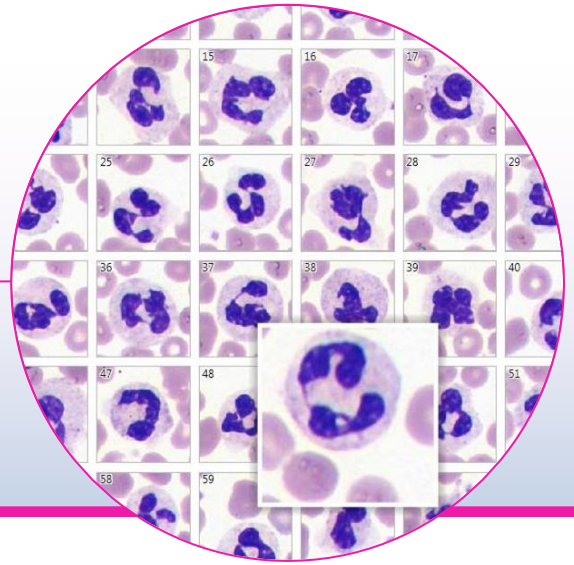
Evolution of Cell Morphology

400
YEARS AGO

Manual Microscopy

- It's time-consuming to review samples, perform differentials and report findings
- Consulting with colleagues or morphology experts requires going back to find suspicious cells again
- Reviewers must be in same physical location as slide and microscope

30
YEARS AGO



Digital Cell-locating Technology

- Snapshots of single cells don't provide full context for sample review
- Frequent reversion to microscope due to limited scan area
- May be difficult to close case remotely

Scopio Labs: Leading the Full-Field Digital Revolution

Today

*Full-Field Peripheral Blood Smear (PBS) Application

CE mark and FDA clearance
for use with Scopio X100 and Scopio X100HT.

**Full-Field Bone Marrow Aspirate (BMA) Application

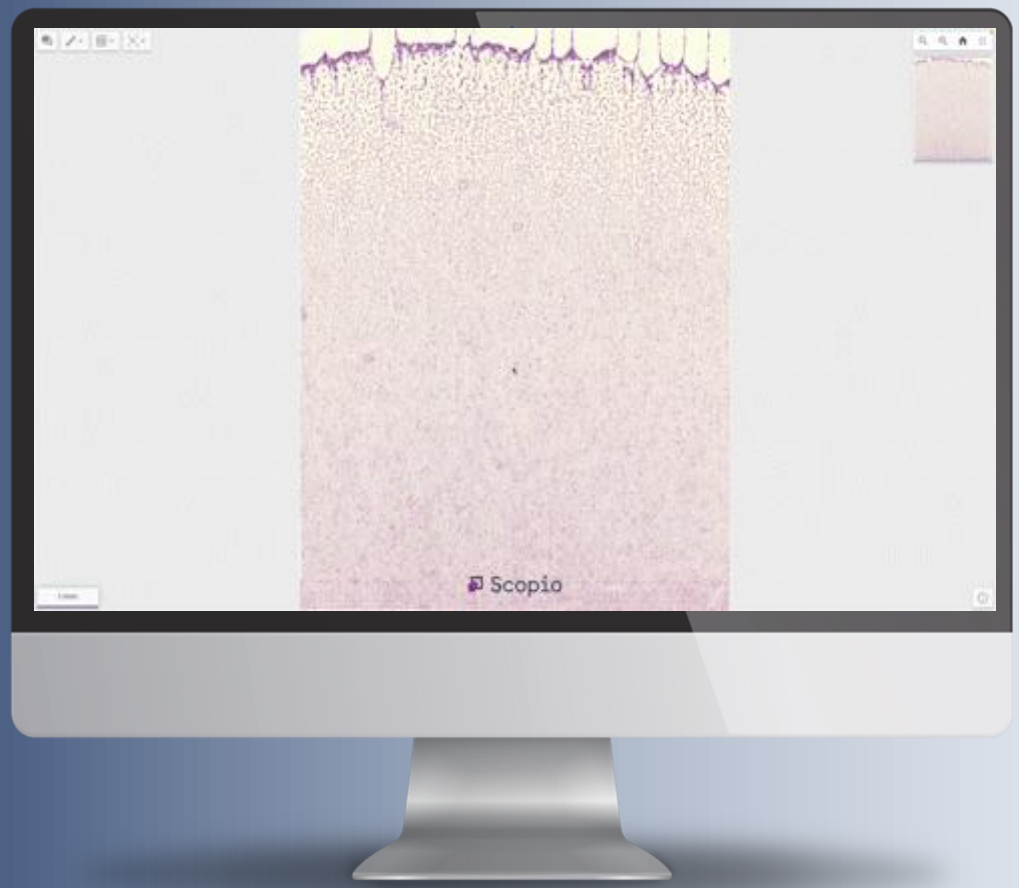
CE mark for use with
Scopio X100 and Scopio X100HT.

Scopio |

*Scopio's X100/ X100HT with Full-Field Peripheral Blood Smear™ Application is CE marked and FDA Cleared. The availability of the RBC-DSS capability may vary by region.

**Scopio's Full Field BMA is CE-Marked and cleared for sale in CE countries as well as in additional regions. Not commercially available in the US for in vitro diagnostic procedures

Scopio Full-Field PBS Application™:
Same as it looks on the glass. But digital.



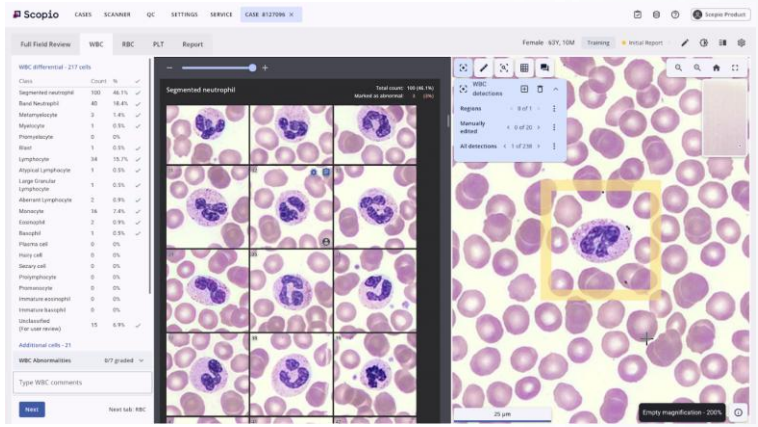
Peripheral Blood Smear review experience at 100x

- **Comprehensive Sample Exploration:** Digital scan of the entire clinically relevant areas, from the monolayer to the feathered edge, at 100x oil immersion resolution.
- **Dynamic Assessment Experience :** Zoom, pan, and navigate the sample to analyze individual cells in full context.

Scopio Full-Field PBS Application™:
Streamline review with AI driven decision support

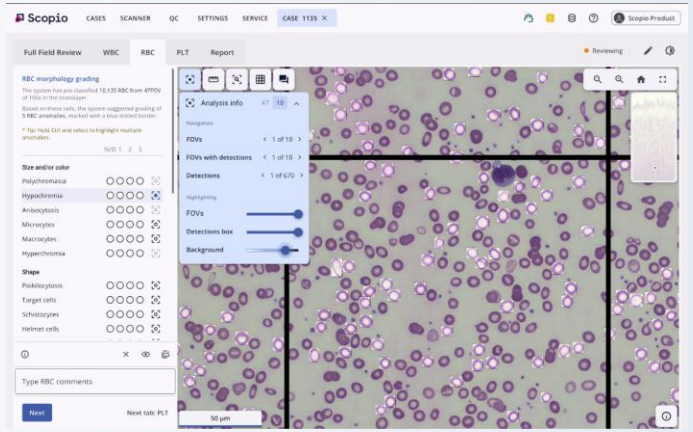
White Blood Cell AI-DSS

- Automatically performs ICSH-recommended 200-cell differential.
- Detection and pre-classification into 14 customizable classes.



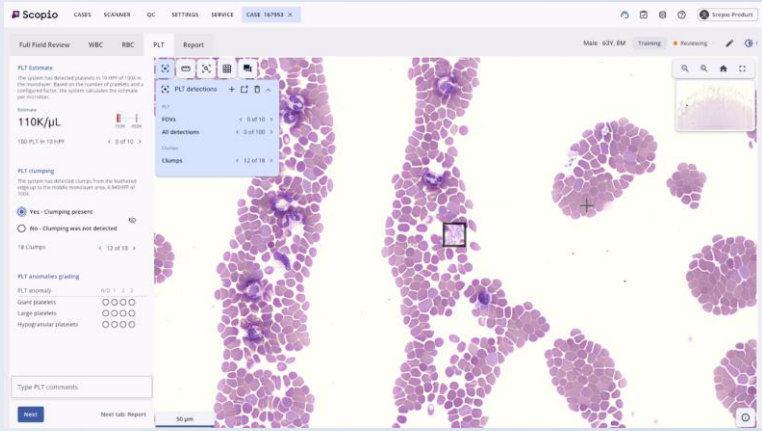
*Red Blood Cells AI-DSS

- Analyzes more than 10,000 cells and pre-grades 22 RBC morphological parameters.
- Detection of morphologic abnormalities such as parasitic inclusions and schistocytes.



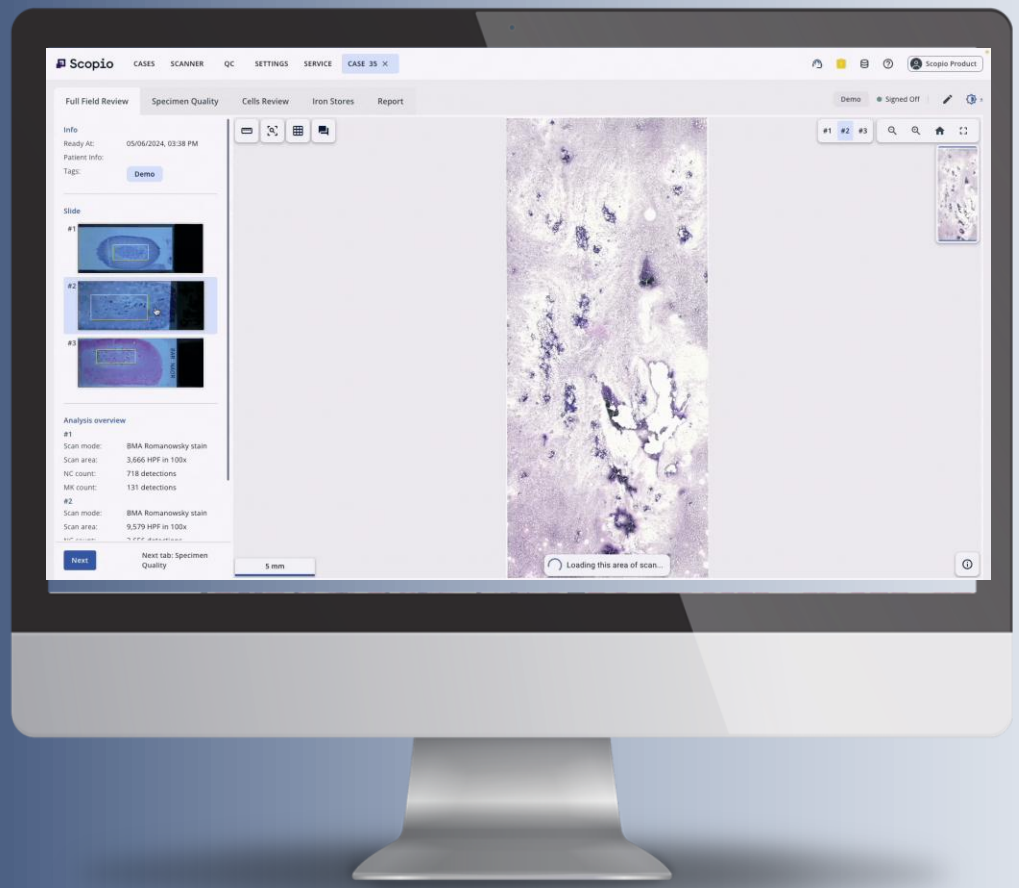
Platelets AI-DSS

- Platelet estimation from 10 high-powered FOV at 100x.
- Automated platelet clumps detection across the scanned area, from the monolayer to the feathered edge.



* Scopio Full Field Peripheral Blood Smear™ application with RBC and platelets DSS enabled is CE marked and approved for clinical use in CE regulated countries

Scopio Full Field-Bone Marrow Aspirate™ Application



Experience the Full-Field Digital Scan:

- **Dynamic Review:**

  Fully digital High-resolution scans allow zooming, panning, and thorough exploration of critical analysis areas.

- **Unparalleled Clarity:**

  100x oil immersion magnification, providing unmatched detail for accurate analysis of bone marrow samples.

Scopio's Digital Morphology Imaging Platform

Scopio X100

- Designed for small to medium labs with up to 50 samples per day
- 3 slides at a time (one slide tray)
- Throughput per hour:
  PBS | Up to 15 slides
  BMA | Up to 3 slides

Scopio X100HT

- Designed for small to medium labs more than 50 samples per day
- 30 slides at a time (three 10-slide cassettes)
- Throughput per hour:
  PBS | Up to 40 slides
  BMA | Up to 9 slides

Scopio’s Secure Digital review platform
Transforming hematology with true digitization

- **Digital Sample Review:** Full-Field™ imaging creates a high-resolution digital copy for comprehensive, standardized analysis.
- **Efficiency:** AI-powered analysis reduces manual workload and improves turnaround time.
- **Remote Collaboration:** Enables case review and expert consultation anytime, anywhere.
- **Scalability:** The Scopio Network Suite streamlines multi-lab management and integration.
- **Security & Compliance:** Built to meet HIPAA, GDPR, ISO 27001, and SOC 2 standards, ensuring data privacy and regulatory compliance.

Current UK Installations

- South West Pathology Services
- Plymouth University Hospitals NHS Trust
- Liverpool University Hospitals NHS Trust
- Synnovis
- Darent Valley
- Cambridge University Hospitals NHS Trust
- Birmingham University
- Stepping Hill
- South West London Pathology
- North West London Pathology

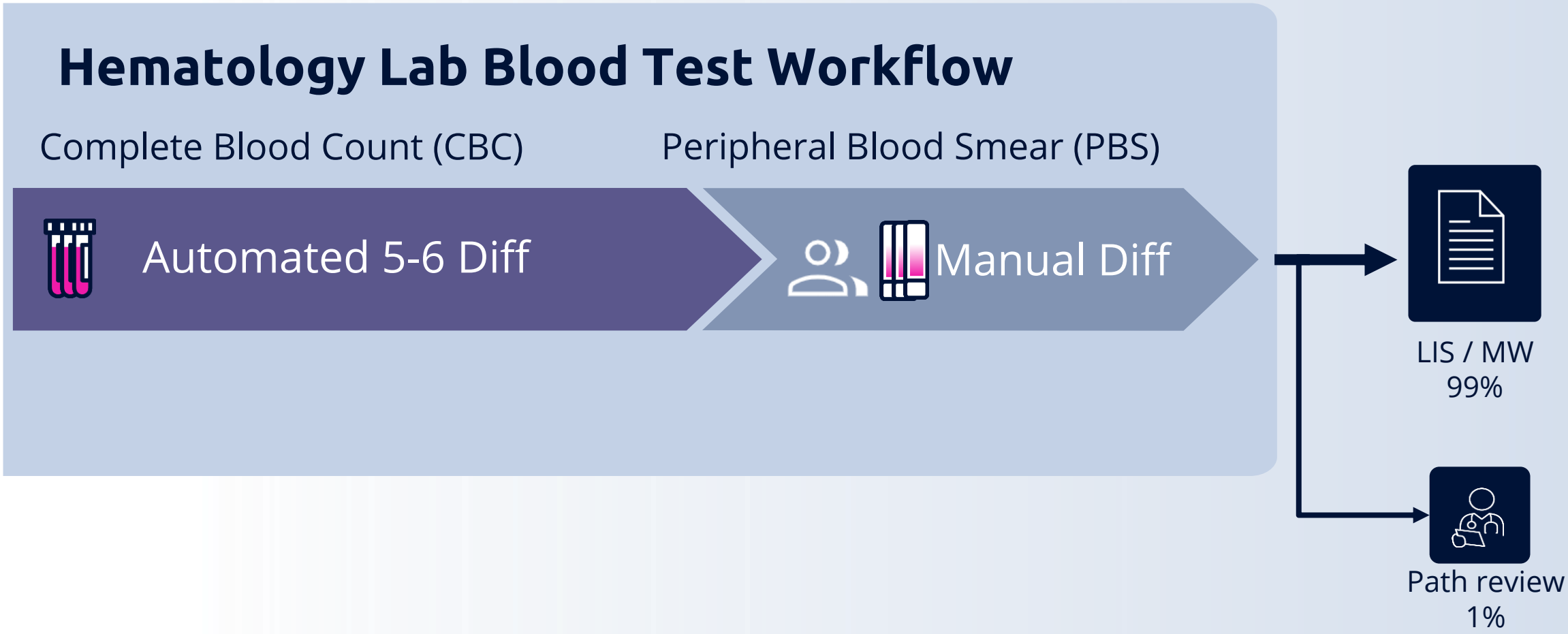
Scopio Labs: Leading the full-field digital revolution

Today

What is next?

*Scopio's (CBM®) Analyzer is still In development, not yet available for in vitro diagnostic use.

Current “Automatic” Hematology Line Workflow: The Hidden Labor-Intensive Reality



From Manual to Fully Automated: The Complete Blood Morphology (CBM®) Analyzer Workflow

Today

Automated 5-6 Diff → Manual Diff

CBM®

The New Hematology Workflow

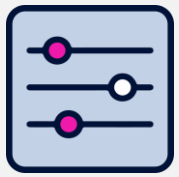
CBC + CBM® = Automated 21-Diff

~99% fully automated analysis

- LIS / MW 99%
- Path review 1%

*Scopio's (CBM®) Analyzer is still In development, not yet available for in vitro diagnostic use.

Complete Blood Morphology (CBM®) Analyzer



Full Automation: Augmenting current CBC analysis with fully automated 21-diff PBS report.

Process Standardization: Quantitative results automatically transmitted to LIS/MW systems.

Advanced Diagnostics: Unlocks the potential to enhance patient care with new clinical insights

*Scopio's (CBM®) Analyzer is still In development, not yet available for in vitro diagnostic use.

Synnovis Implementation Perspective:
From manual to digital cell morphology

Presenter: *Vassan Thavarajah*

Role: *Blood Sciences, Operations Manager*

Agenda

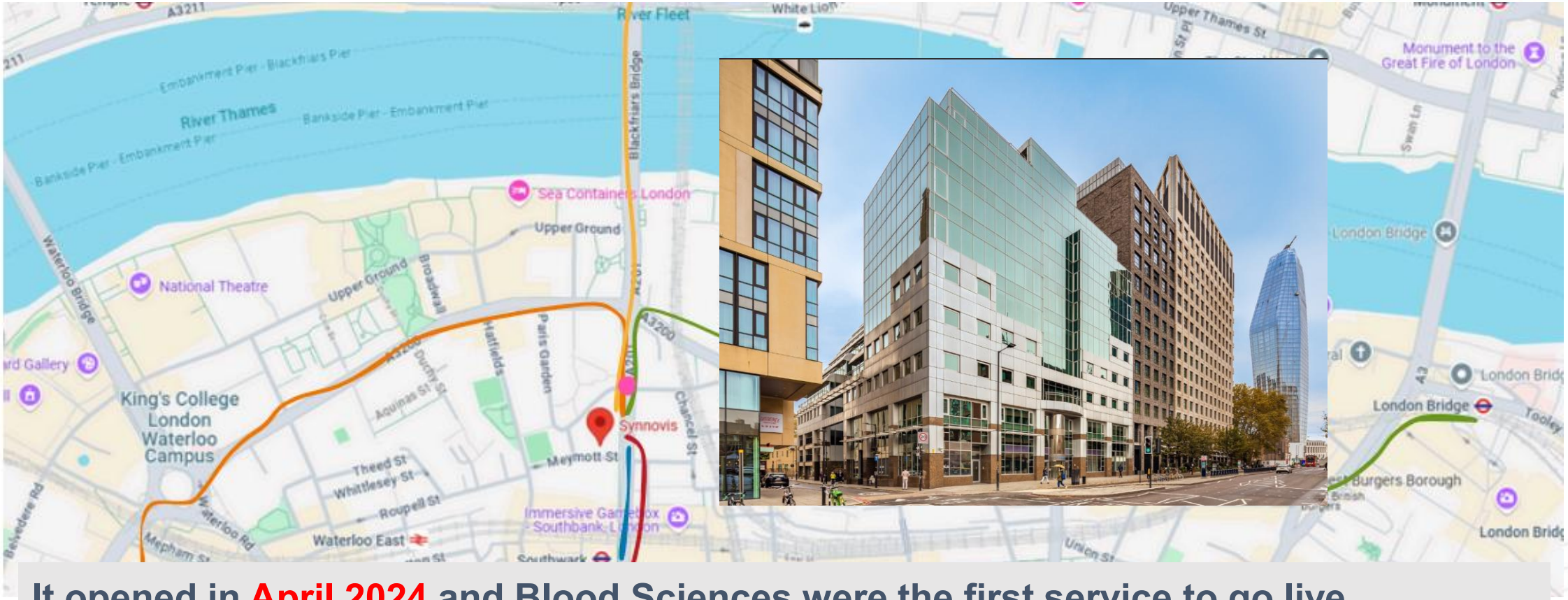
- Synnovis + Haematology Lab Overview.
- Blood Film Morphology and how it worked prior to Scopio.
- Synnovis's challenges.
- Planned workflow with Scopio at the Hub
- Operational benefit of Scopio for Synnovis.

Synnovis at a glance

- Guy's & St Thomas' Hospitals (GSTT)
- King's College Hospitals (Denmark Hill & Princess Royal).
- Royal Brompton & Harefield Hospitals (RBHH)

Providing services for **over 190** Primary Care Practices from Southeast London

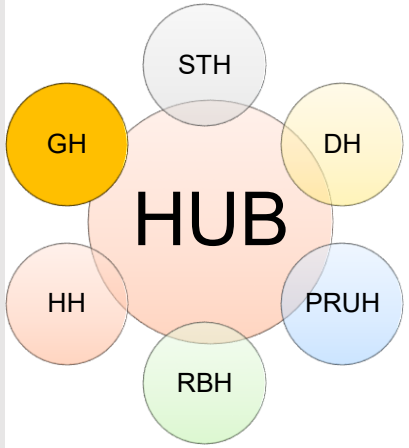
Synnovis Hub (Blackfriars)



It opened in April 2024 and Blood Sciences were the first service to go live

Synnovis Haematology Overview

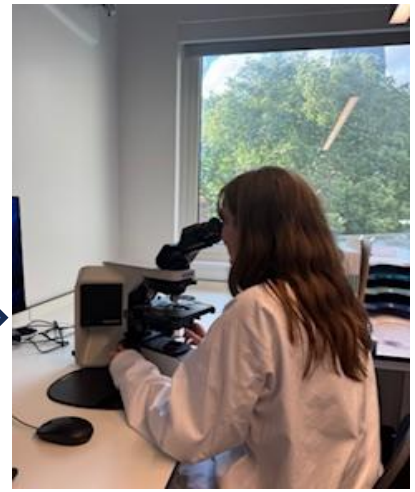
- **Seven** automated haematology sites.
  - Hub being the largest site (2x XN-9100 tracks).
  - Essential Service Laboratories.
- **One** analytical platform for all: FBC + Morphology
  - Sysmex XN-10/XN-20.
  - SP50
  - Scopio X100 and X100HT
- **Single** IT
  - Middleware (Sysmex EPU) and LIMS (Epic Beaker).
- **Harmonised** haematology processes, reference ranges, critical limits and blood film criteria for BMS/SpR review.



Blood Film Morphology and how it worked prior to Scopio

- **Prior to April 2024** Synnovis had a manual morphology solution utilising microscopes across the network
- Optical microscope method – **Gold standard.**
- Morphology reporting **on site** at the laboratory area.
- Peripheral Blood Film Morphology (PB) request made using site specific laboratory defined clinical criteria.
- **Specialist BMS** required on site to perform daily review.
- Haematology SpR/Consultant required on site for routine referrals.
- On call Haematologists required to attend the lab during out of hours for critical referral.
- Glass slide couriered, in the event any rare specialist cases that required clinical input on another site.

PB Film Morphology workflow prior to Scopio



Manual
Slide Prep

24/7 AP and MLA

Manual
Microscopy
Review in Lab

Specialist BMS
24/7 on site

Clinical Haematology
Referral Review
Specialist registrar on site and available to visit lab during on-call

Synnovis's challenges

- BSL transformation to Hub and Spoke model started in September 2023 and ongoing.
- Alongside multiple large scale organisational changes.
- Cyber incident June 2024 soon after the move to the Hub in April 2024 that lasted for several months with varying effect on different services.
- Significant effort made to rebuild and recover the IT infrastructure.
- Re-patriation of services back to the Hub.

Planned workflow with Scopio at the Hub

synnovis
A SYNLAB pathology partnership

HH
STH
RBH
GH
DH
PRU
H

HUB

Automated
Slide Prep

24/7 AP and MLA

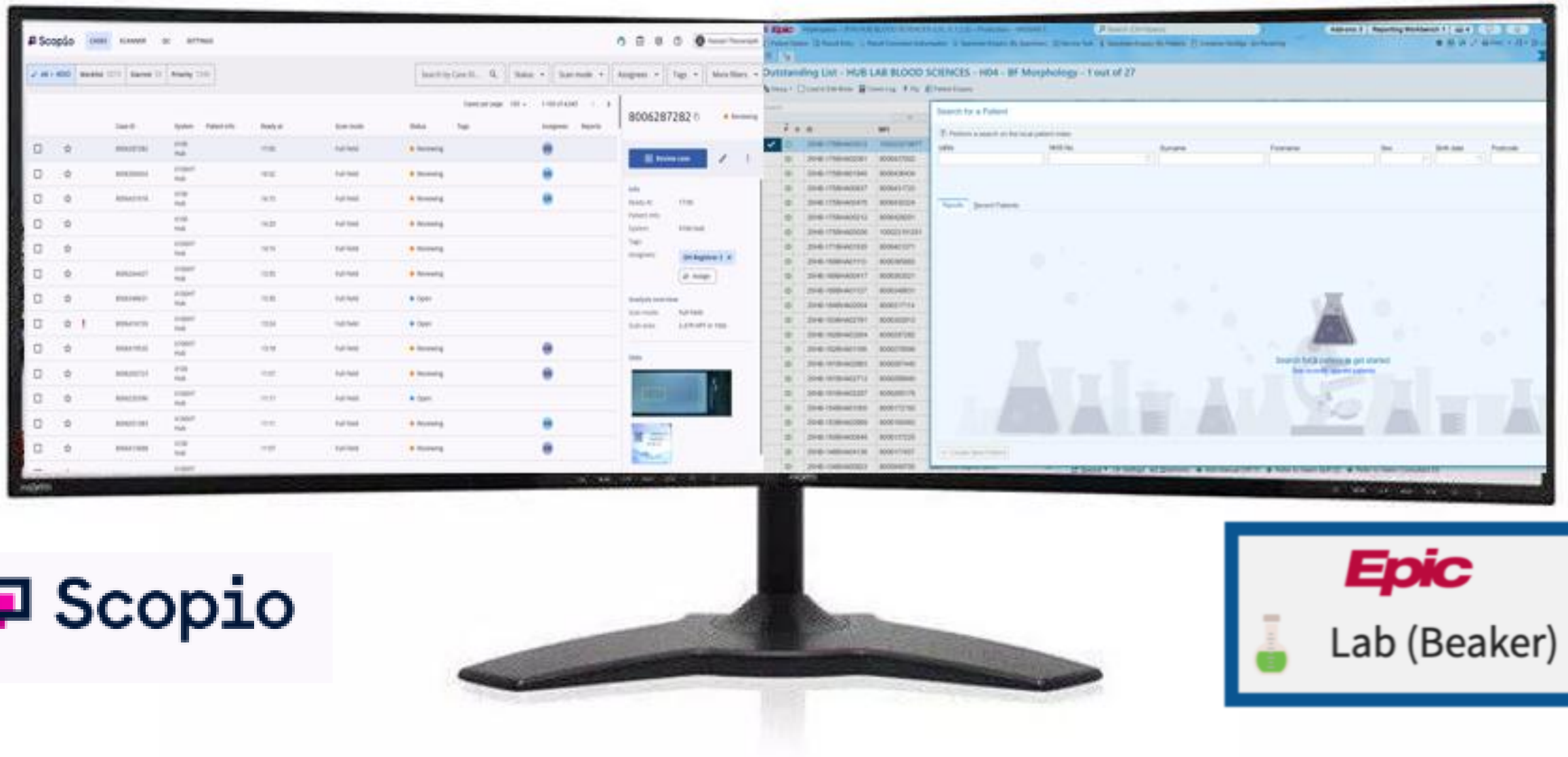
Routine scanning
of slides 24/7

Specialist BMS
24/7 review.
On site or remote
reporting

Haematology
Specialist registrar
review.
Performed remotely 24/7.

SYNLAB
NHS Guy's and St Thomas' NHS Foundation Trust
NHS King's College Hospital NHS Foundation Trust

Scopio set up and connectivity

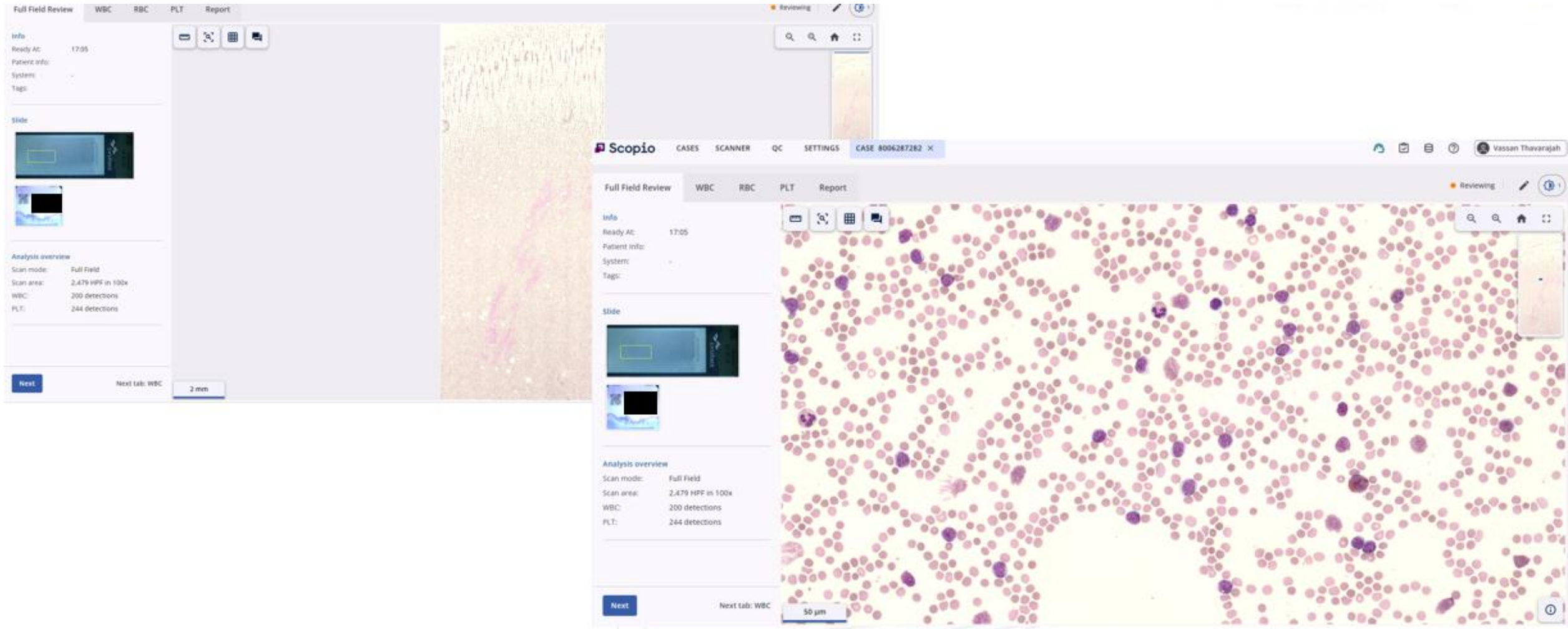


Scopio

Epic

Lab (Beaker)

Scopio set up and connectivity



Distribution of workload changes

Prior to April 2024

Laboratory	Annual FBC	Blood Films @ 5% Annual
Hub	-	-
KCH ESL	975,341	48,767
GSTT ESLs	858,360	42,918
PRUH ESL	805,797	21,430

Current

Laboratory	Annual FBC	Blood Films @ 5% Annual
Hub	1,580,807	79,040
KCH ESL	184,938	9,247
GSTT ESLs	226,038	11,302
PRUH ESL	112,435	5,622

Benefits of Full-Field Digital Morphology

- Allow remote access to all blood film slides for reporting by Scientific and Clinical staff.
- Allow **full field view of the slide** and avoids the need for the review with a microscope.
- Delivery of a robust and resilient morphology service across multiple sites.
- Support cross site working across all network sites including standardised processes, training and reporting processes.
- Better utilisation of scientific and clinical expertise.
- Improved turnaround times for Morphology overall.

- Eventually the aim is to utilise the AI-powered Decision Support System (DSS) to support and improve result reporting !!!

Thank you

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NHS
North West London Pathology

Fireside Interview

Mr Chris Sleight MSc BSc FIBMS
Chief Officer
Greater Manchester Diagnostics Network

Michelle Martin
Deputy Director of Elective Improvement - London Region
NHS England (London Region)

NHS
North West London Pathology

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Case Study

DIAGNEXIA
Remote Expert Pathology

NHS
North West London Pathology

Case Study

Donal O'Shea
Chief Executive Officer
Diagnexia

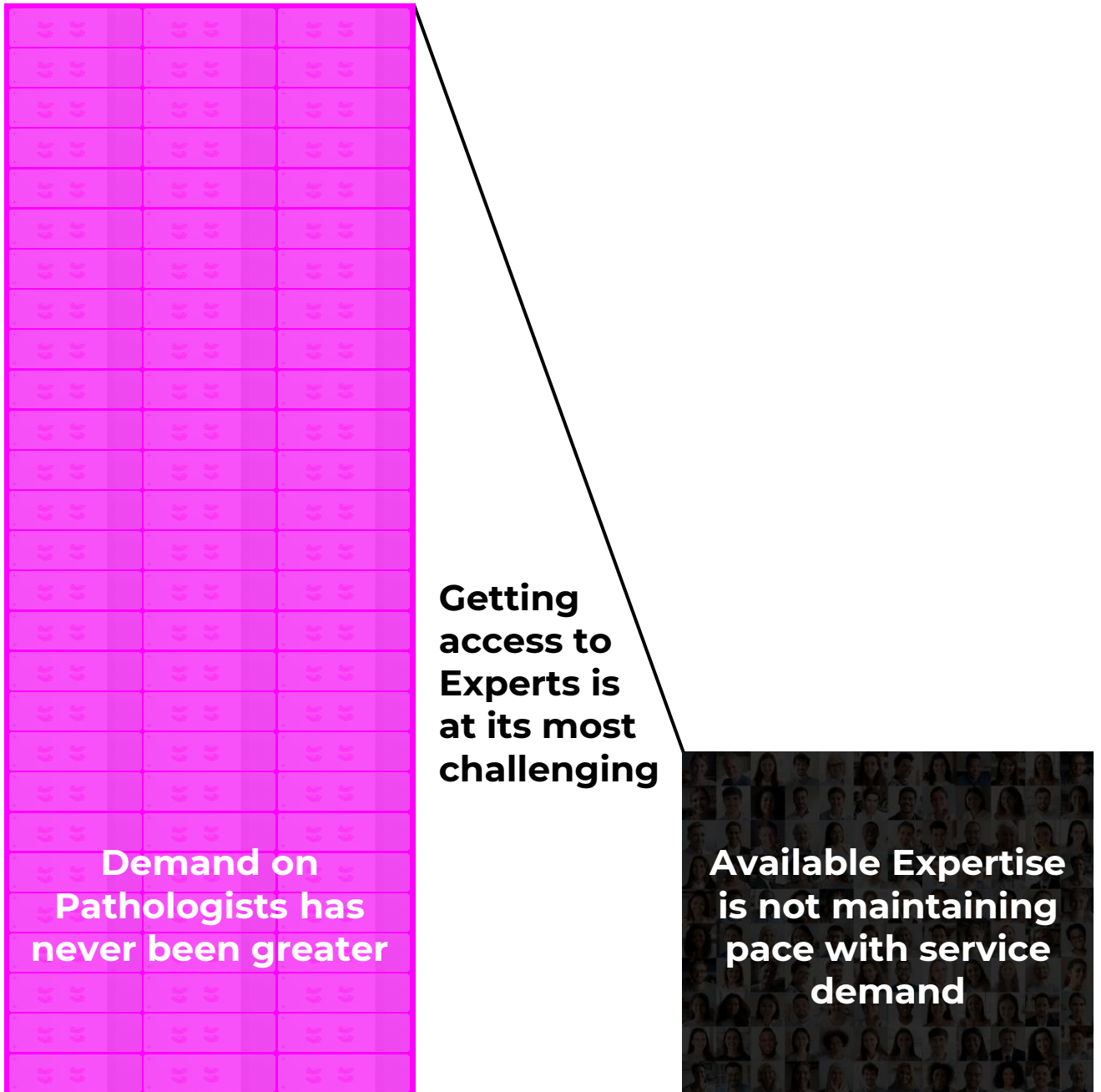
NHS
North West London Pathology

Pathology Futurescape

Donal O'Shea Ph.D.

Chief Executive Officer, Deciphex

Pathology Services Are Facing A Major Global Supply & Demand Challenge Within The Next 10 Years



The Diagnostic Crunch
And What It Means for Patients

UK pathology services face significant challenge as **one-third of pathologists are over 55** and approaching retirement while only **3% of departments have enough staff** to meet clinical demand

7.2% Compound Annual Growth in Sample Volumes

Reporting gap of 26% nationally

Over **1.4m cases** annually under-addressed

2x Overtime + 3x Outsourcing in Last 3 years


Pathology
Needs Digital
Transformation

This Will Be Driven By A Combination Of Digital Pathology And State Of The Art AI

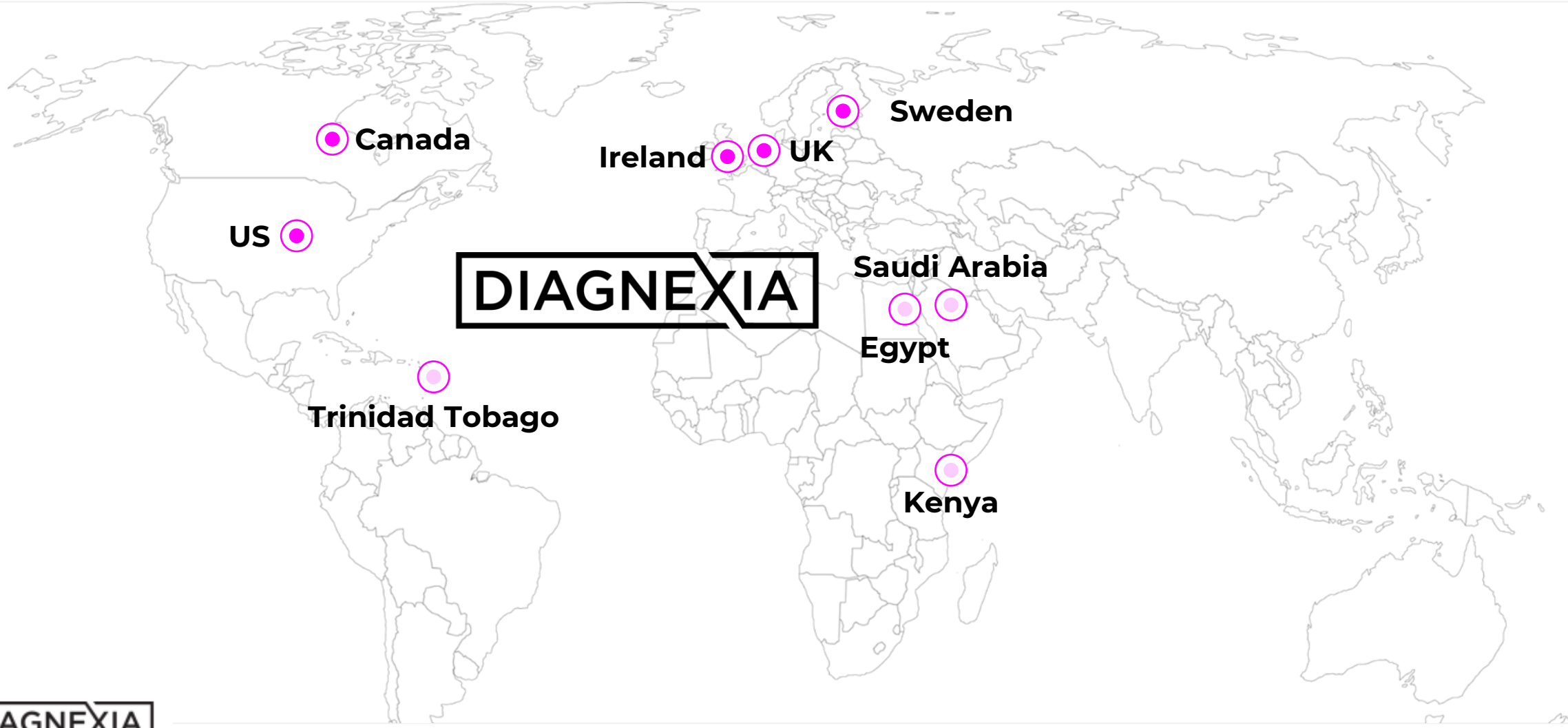
DIAGNEXIA

A global network of 250 expert subspecialty pathologists, connected through a state-of-the-art digital platform, ensures timely, accurate, and high-quality diagnostic services accessible around the clock

Our Vision

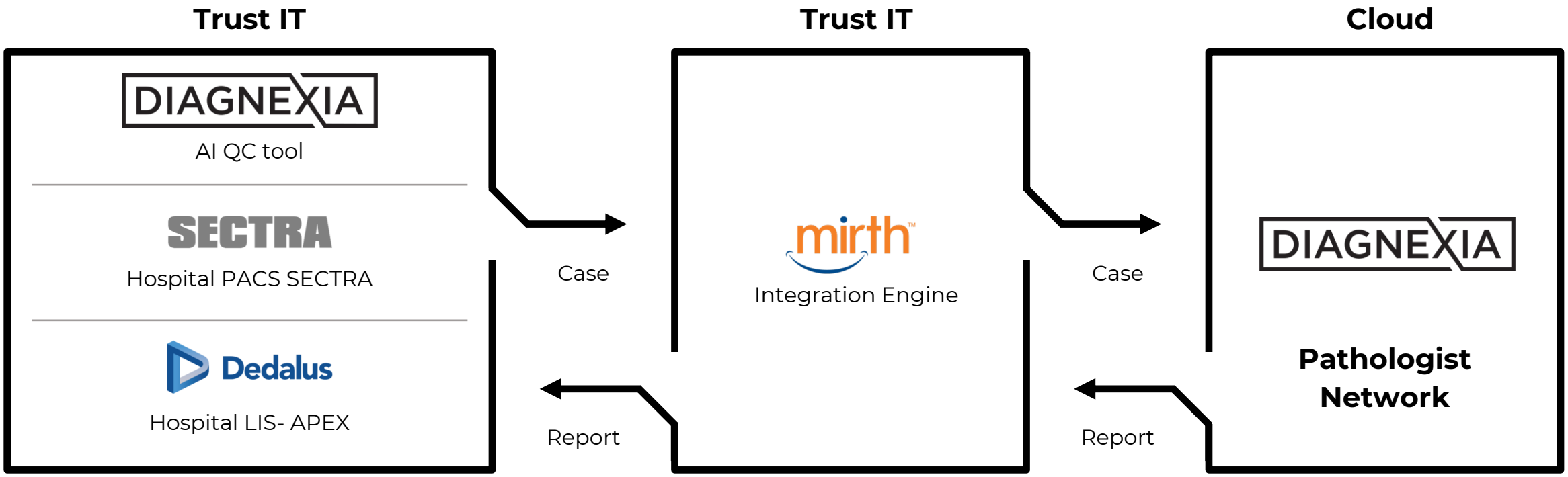
Digitally connect diagnostic laboratories to **locally registered, subspeciality pathologists** worldwide to TRULY increase local pathology capacity

Diagnexia Provide Regulated Primary Diagnostics And Consults in Multiple Countries Worldwide



DIAGNEXIA

Truly Embedded in the Workflow
Diagnexia as a Virtual Extension of a Clinical Team



NHS East Sussex Healthcare NHS Trust

Fully Digital End - To - End Workflow with Diagnexia

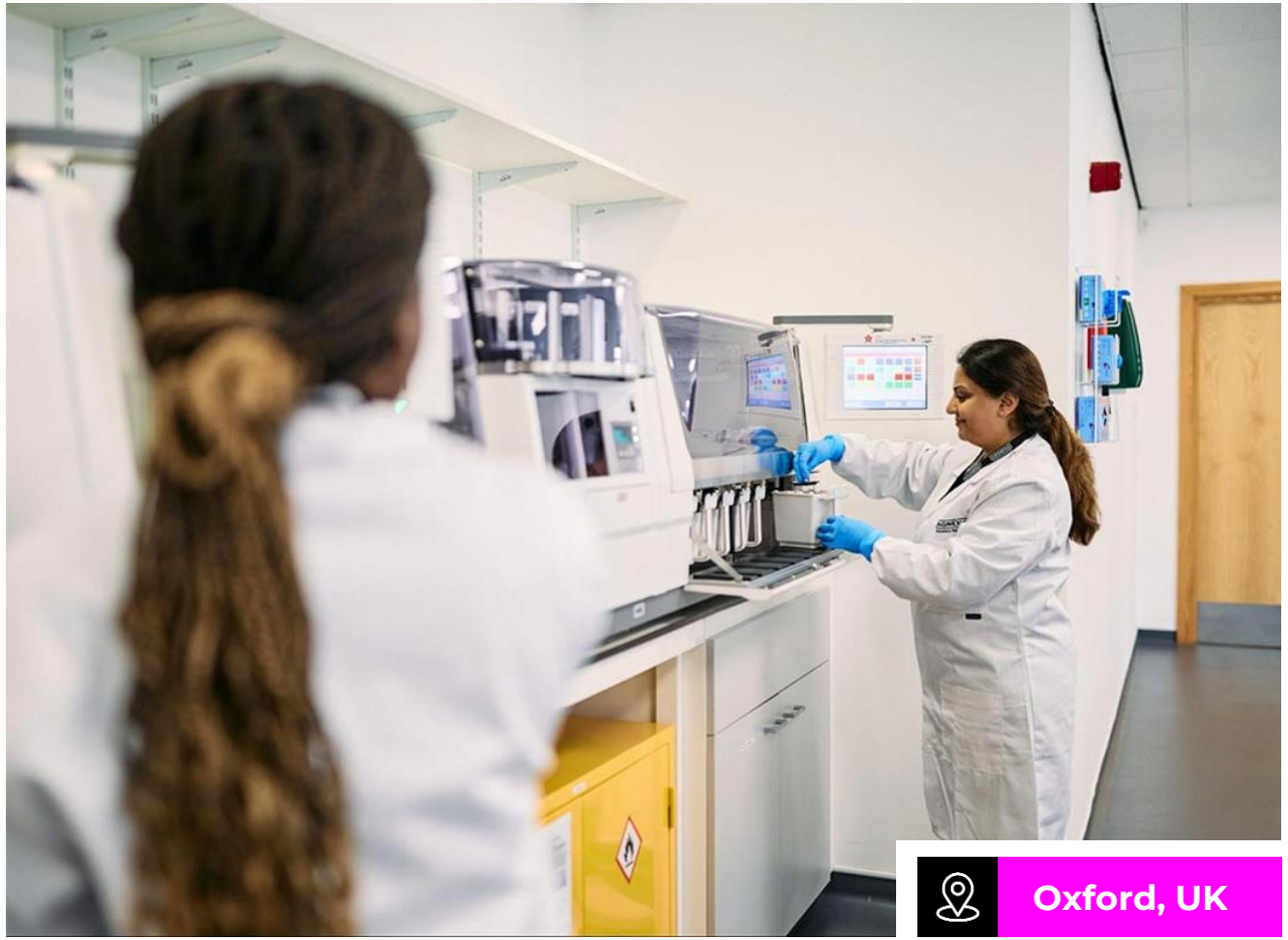
With Highly Scalable Laboratory Support where Tissue Processing Challenges Exist

New **Oxford histopathology lab** launched in 2024 with CQC registration and **400,000 peak annual specimen capacity**, expanding UK diagnostic capabilities.

Diagnexia is a digital-first fully integrated **pathology provider with UKAS accreditation** under ISO 15189:2022. **Accreditation in principle achieved for Laboratory in June 2025.**

Advanced tissue processing and automated staining systems installed to handle high-volume specimen preparation with precision and consistency.

Modern laboratory information management system (LIMS) **integrated** with digital pathology platform for seamless case tracking.



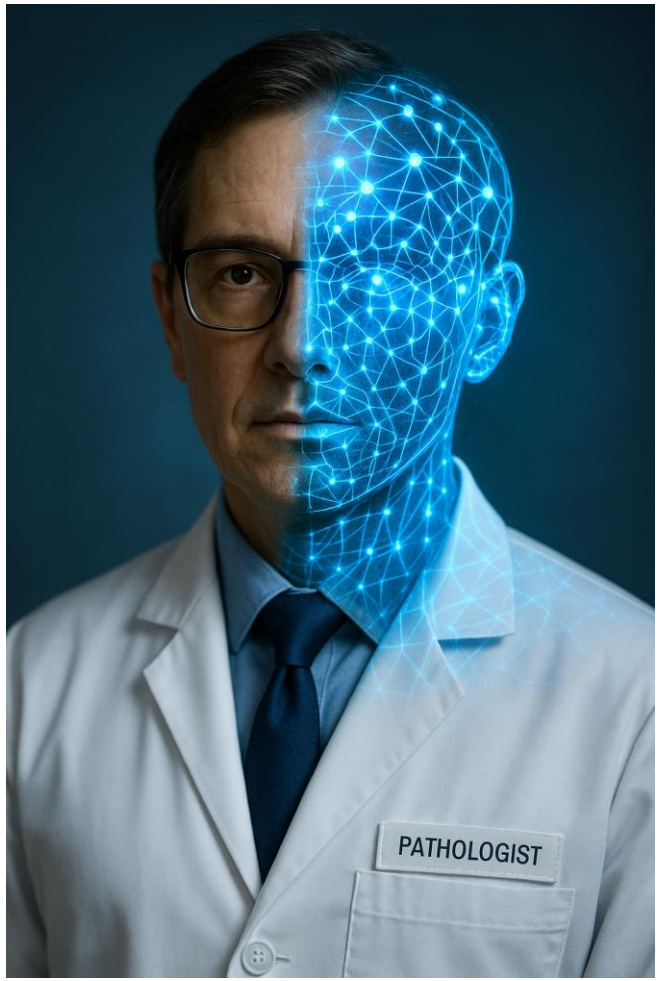
Oxford, UK

DIAGNEXIA

We Need to Radically Overhaul Global Reporting Capacity

2X

- **State-of-the-Art**
- **Speed**
- **Safety**
- **Quality**



DIAGNEXIA

Flying Higher Faster & Safer

The Six Sigma Mindset drives us towards Higher Quality Efficient Diagnostics

Lean

- Eliminate waiting times
- Streamline workflows
- Reduce handoffs
- Standardize processes
- Patient-centered value

VS

Six Sigma

- Reduce diagnostic errors
- Control turnaround times
- Standardize reporting quality
- Optimize resource allocation
- Patient-centered outcomes

Impact of improved reporting processes

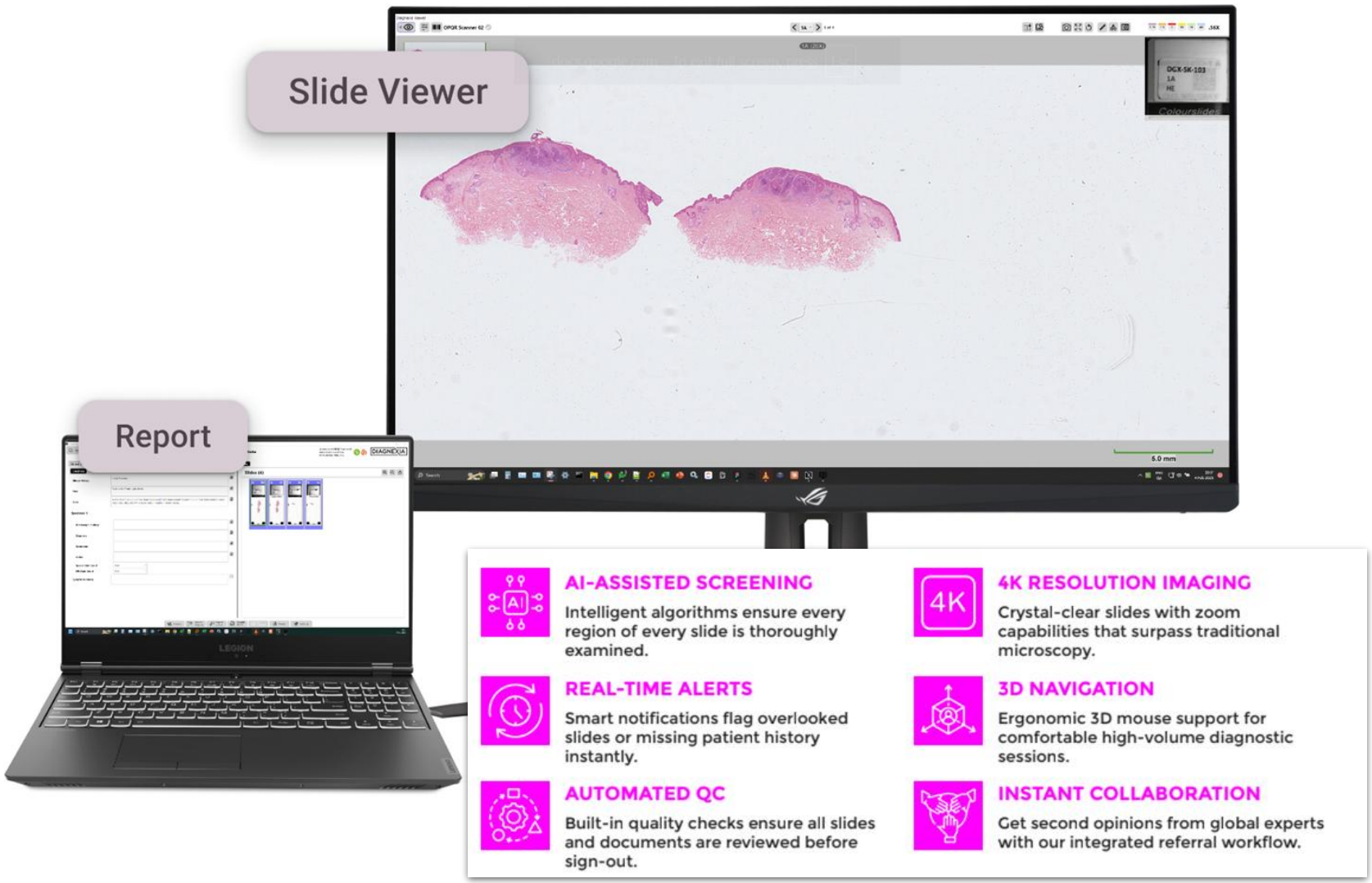
- Improved Quality
- Improved Delivery
- Satisfied Pathologists
- Satisfied Patients

DIAGNEXIA

Enhanced Ergonomics for Reporting Efficiency

Continuous Focus on Ergonomics Enhancement

- Pathologists Workshops
- High Frequency Releases
- Continuous Compliance
- Acute focus on click reduction
- Reduce Mouse Movements
- Fast Keys
- Voice Dictation
- Canned Report Templates
- Automation



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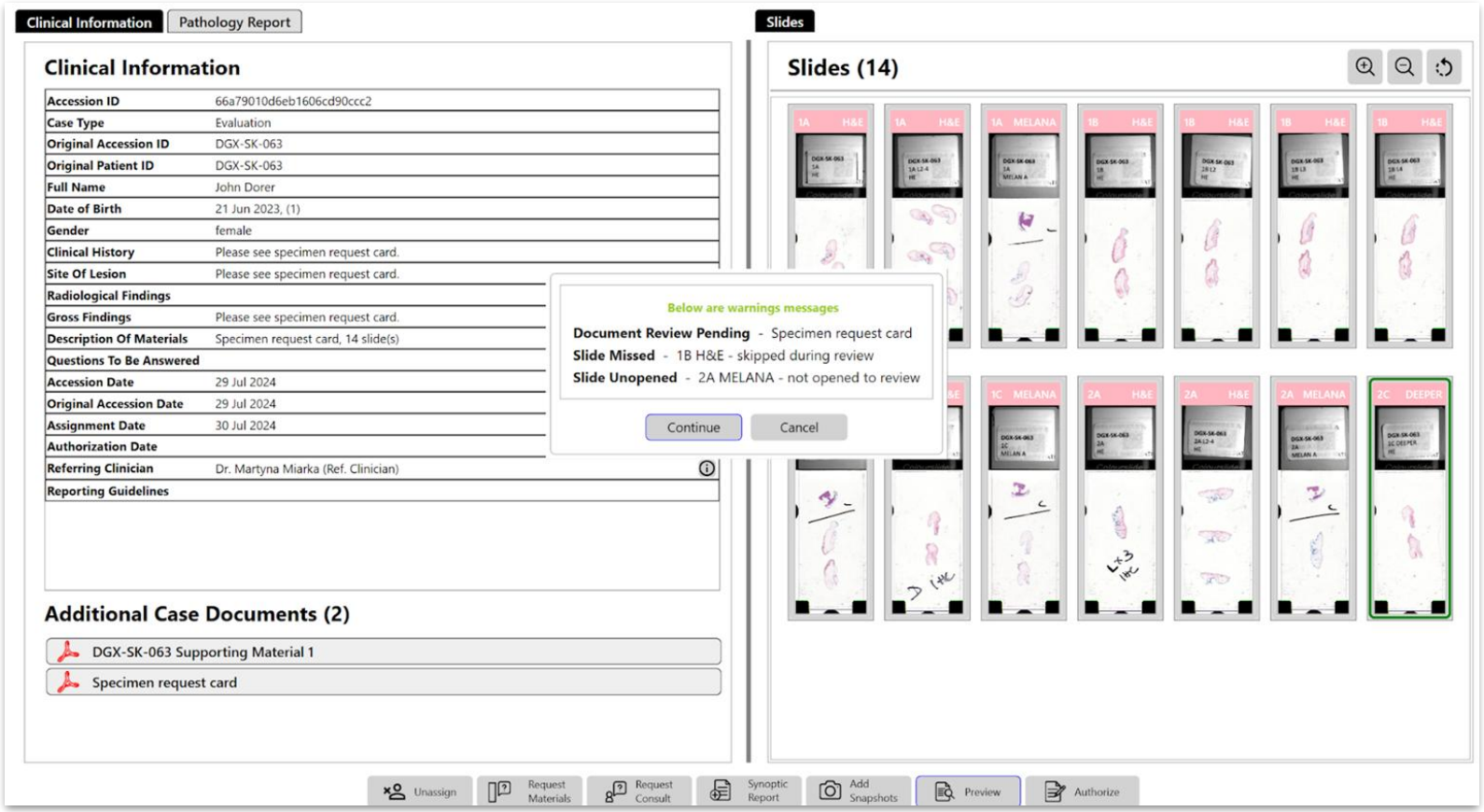
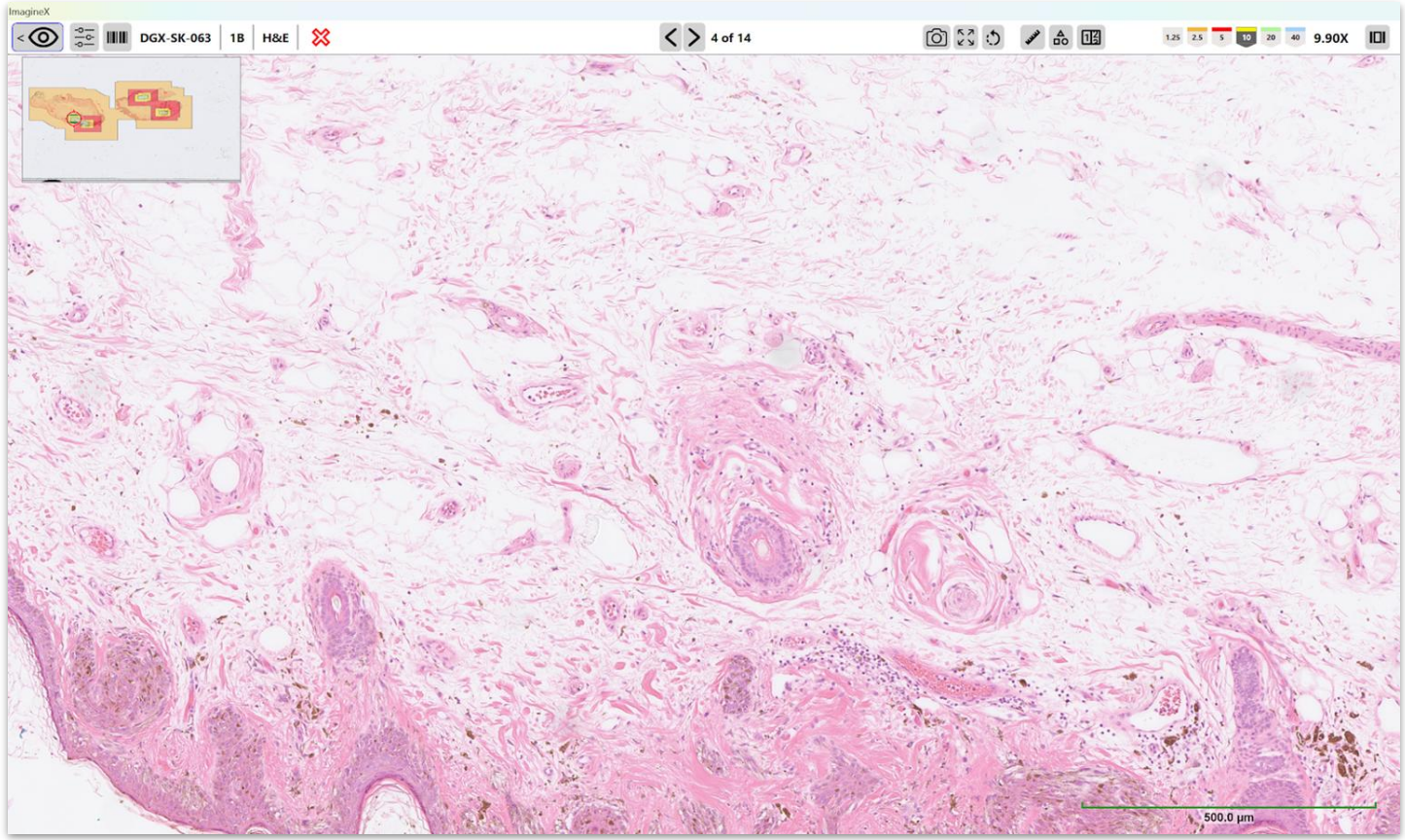
Technical Controls For Risk Management
All Images and Documents Opened Before Sign Out



DIAGNEXIA

Technical Controls For Risk Management
Heatmap of all observed regions captured and stored



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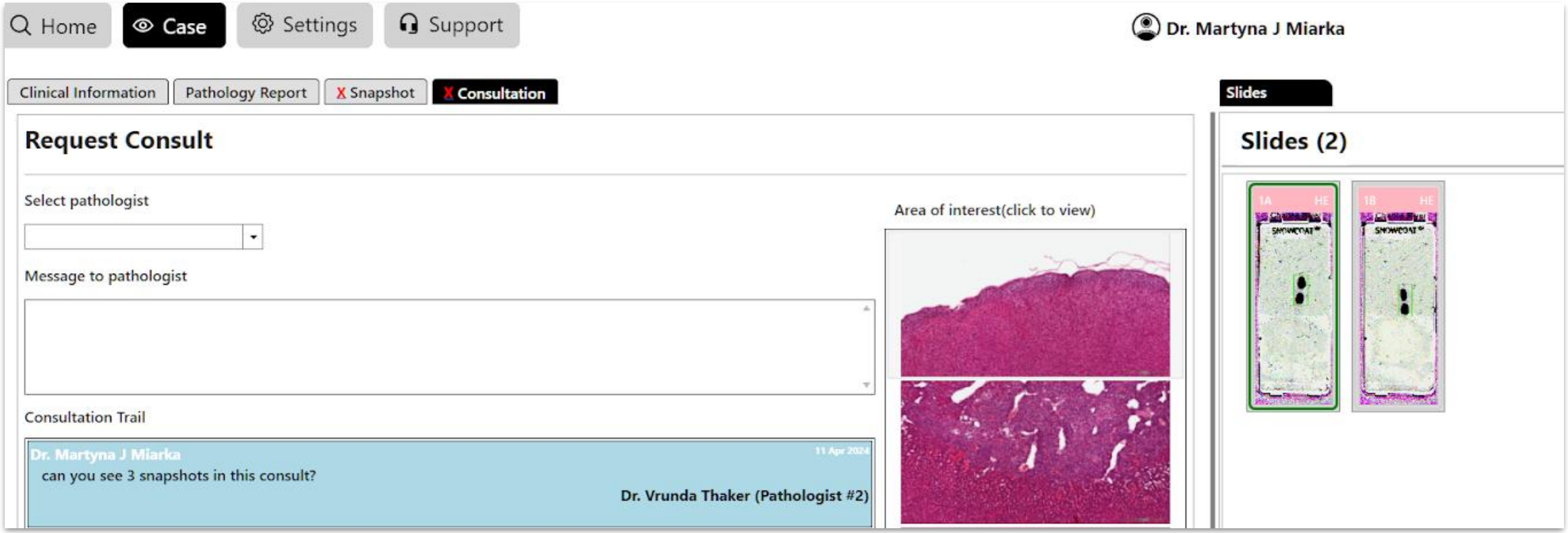
Technical Controls For Risk Management
Inbuilt Virtual “Corridor Consults”



DIAGNEXIA

Pathologists Don’t Want to Make Mistakes and Appreciate The Inbuilt Safety Initiatives

> “The system used by Diagnexia is very good, easy to use and helpful.
> The AI system ensures that all parts of the image are examined.”

Dr. Ghada Bashat

9.4

Pathologist NPS

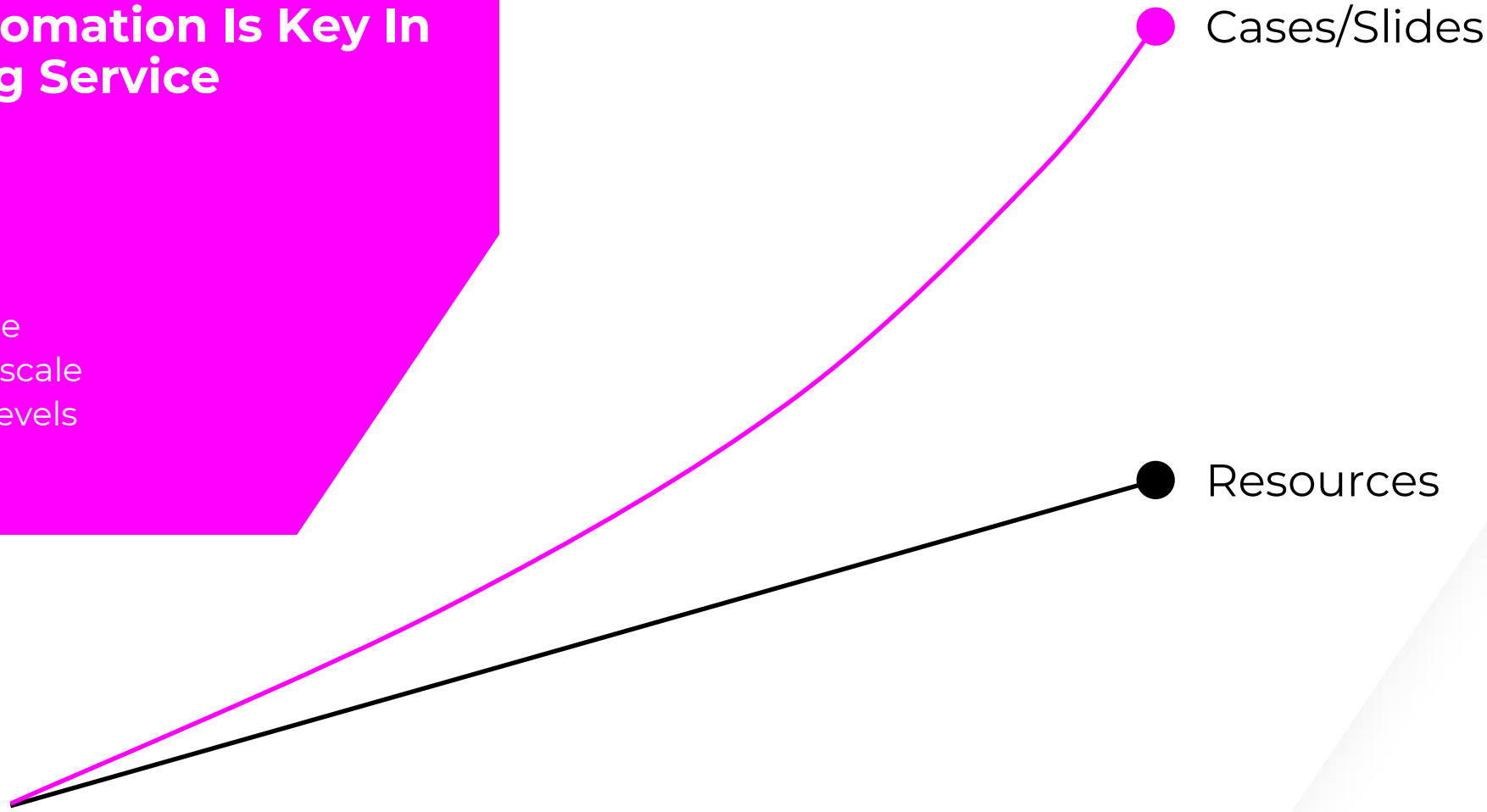
40%

Pathologist estimated faster reporting on Diagnexia

DIAGNEXIA

AI Supported Automation Is Key In Terms Of Ongoing Service Fulfilment

We continuously challenge ourselves to continuously scale cases against resourcing levels



AI Is Shaping The World

“

Artificial intelligence is the new electricity.

Andrew Ng

AI pioneer and co-founder of Google Brain

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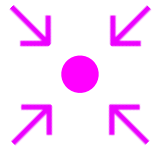
AI Through a Vendor Lens



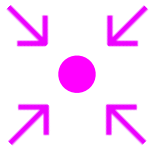
Cancer Diagnostics And Prognostics

AI Through the Diagnexia Lens

Service Oversight & Management

Pathologist & Client Interactions

Clinical Diagnostics



Cancer Diagnostics And Prognostics

Laboratory Automation

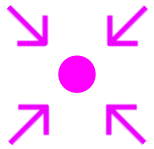
Case Distribution

AI Through the Diagnexia Lens

Service Oversight & Management

Pathologist & Client Interactions

Clinical Diagnostics



Cancer Diagnostics And Prognostics

Laboratory Automation

Case Distribution

We Are Making Good Progress In Automating Digital Pathology Processes

In 18 months we

+15%

Compound monthly Increase case throughput

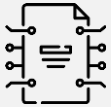
Reduced

- Case accession time
- Manual interventions

Increasing **automated first scan** success rate to 97.5% using AI in the scanner

Automated label reading facilitating accelerated case assembly for assignment

Elimination of manual **image quality checks** using AI focus and completeness checks



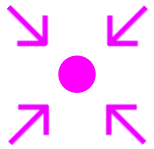
Fully **automated case assembly and assignment** using AI

AI Through the Diagnexia Lens

Service Oversight & Management

Pathologist & Client Interactions

Clinical Diagnostics

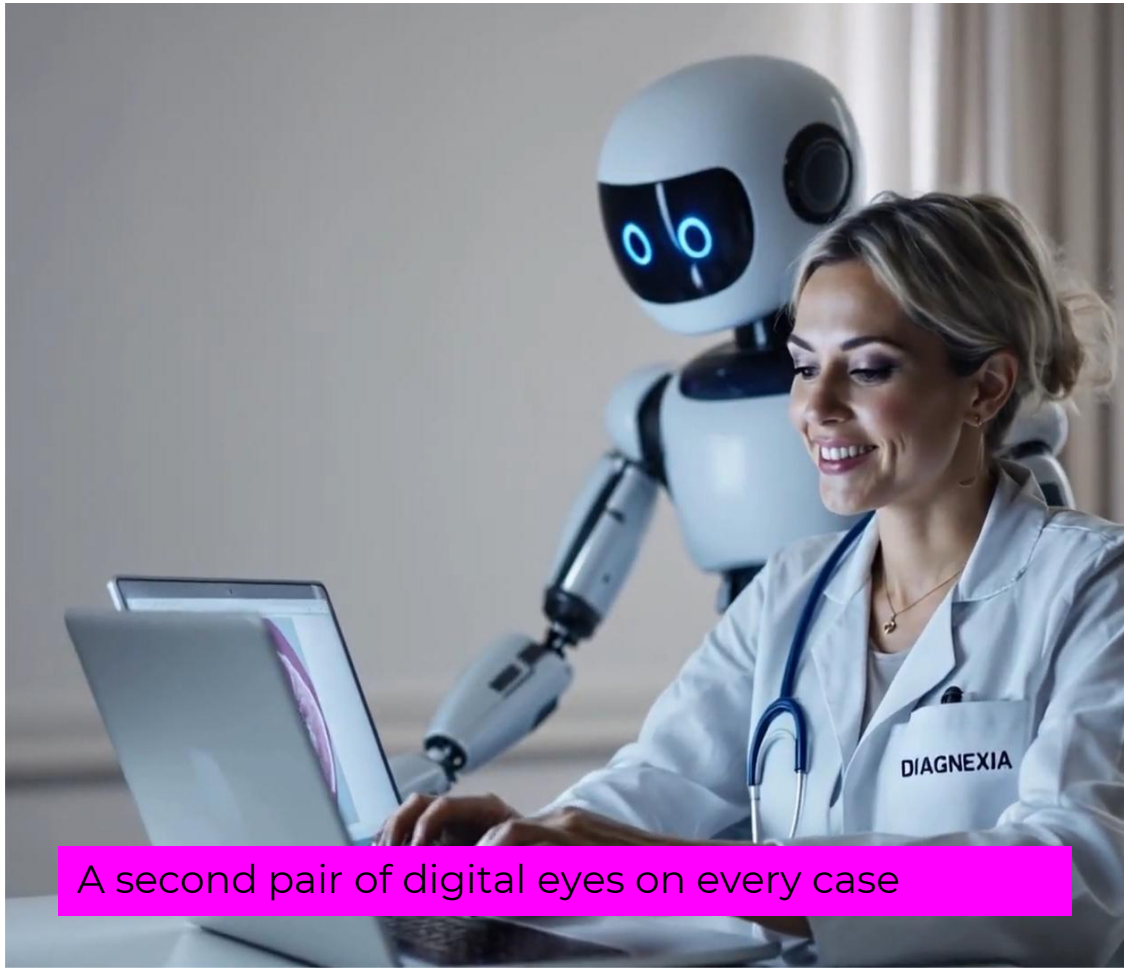


Cancer Diagnostics And Prognostics

Laboratory Automation

Case Distribution

Diagnexia is Utilising its Data Resources to Develop a Fully Comprehensive AI driven IQA program



- GI
- Skin
- Gyne
- H&N
- GU
- BST
- Others

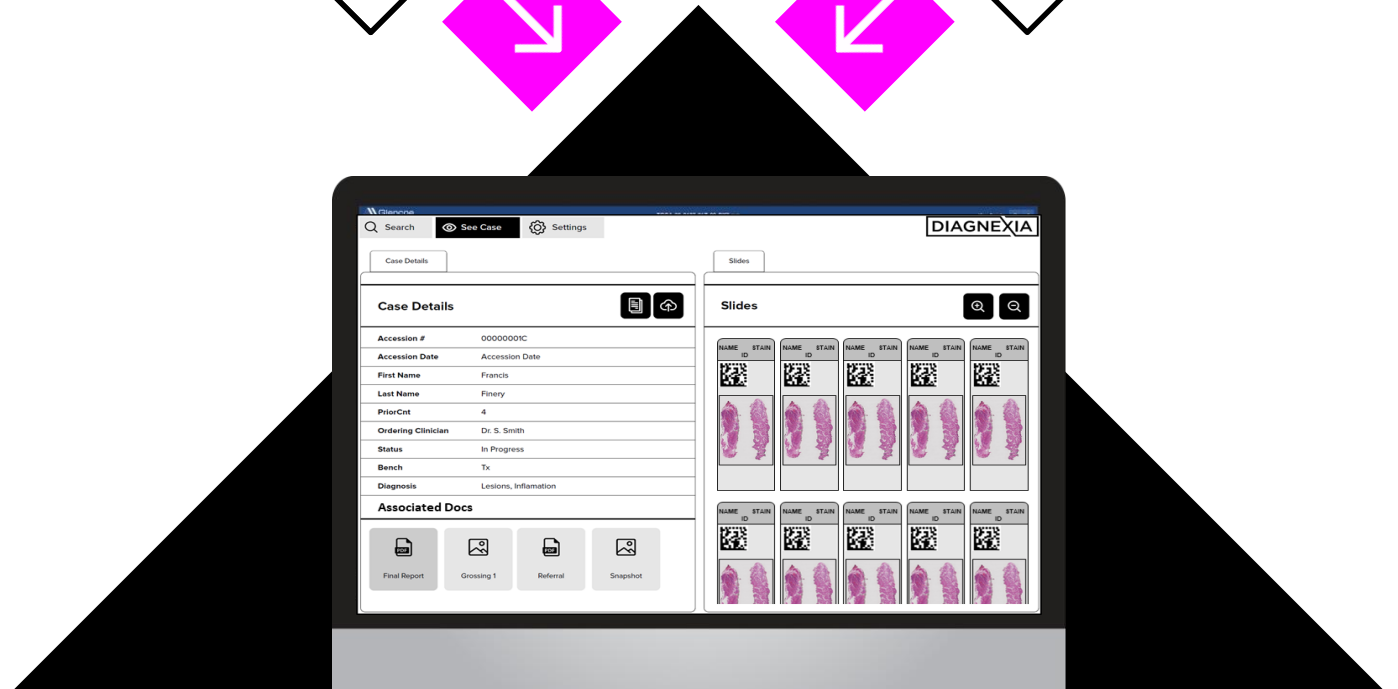
Service volumes will allow us to build gold standard performance AI algorithms to cover **80%** of our caseload

DIAGNEXIA

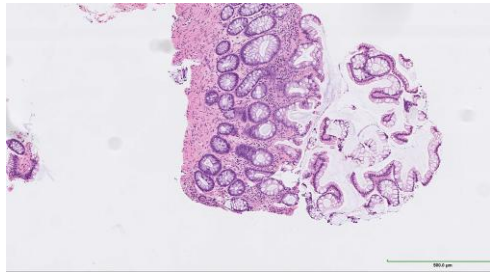
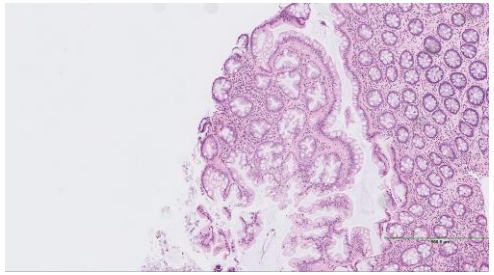
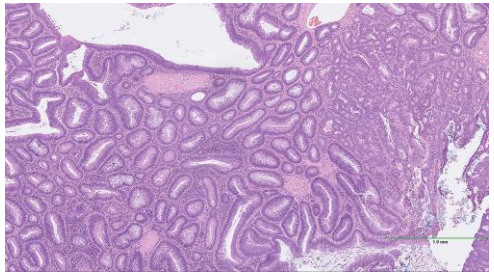
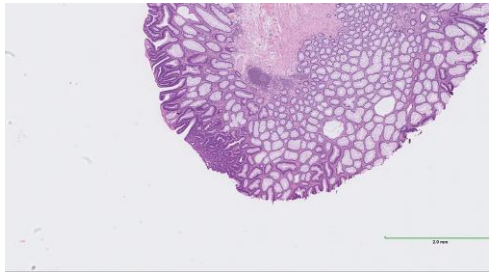
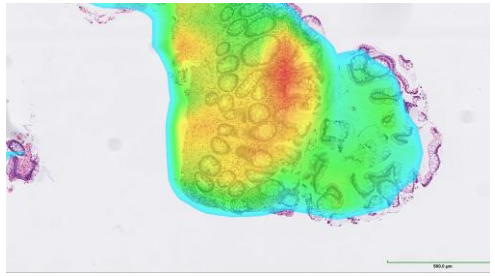
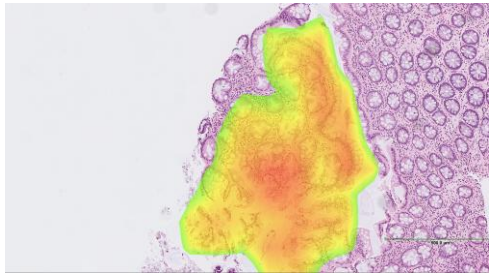
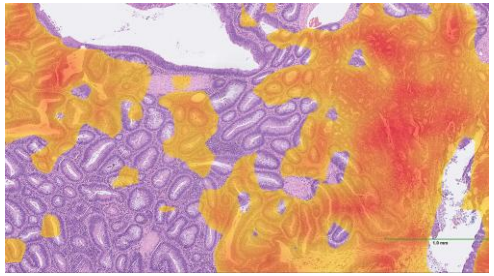
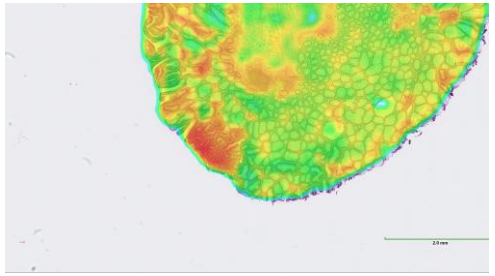
AI-Enriched Colorectal QC Review Implemented In Our Daily Service

AI Discordance (3% of cases)

Random Selection (2.5% of cases)

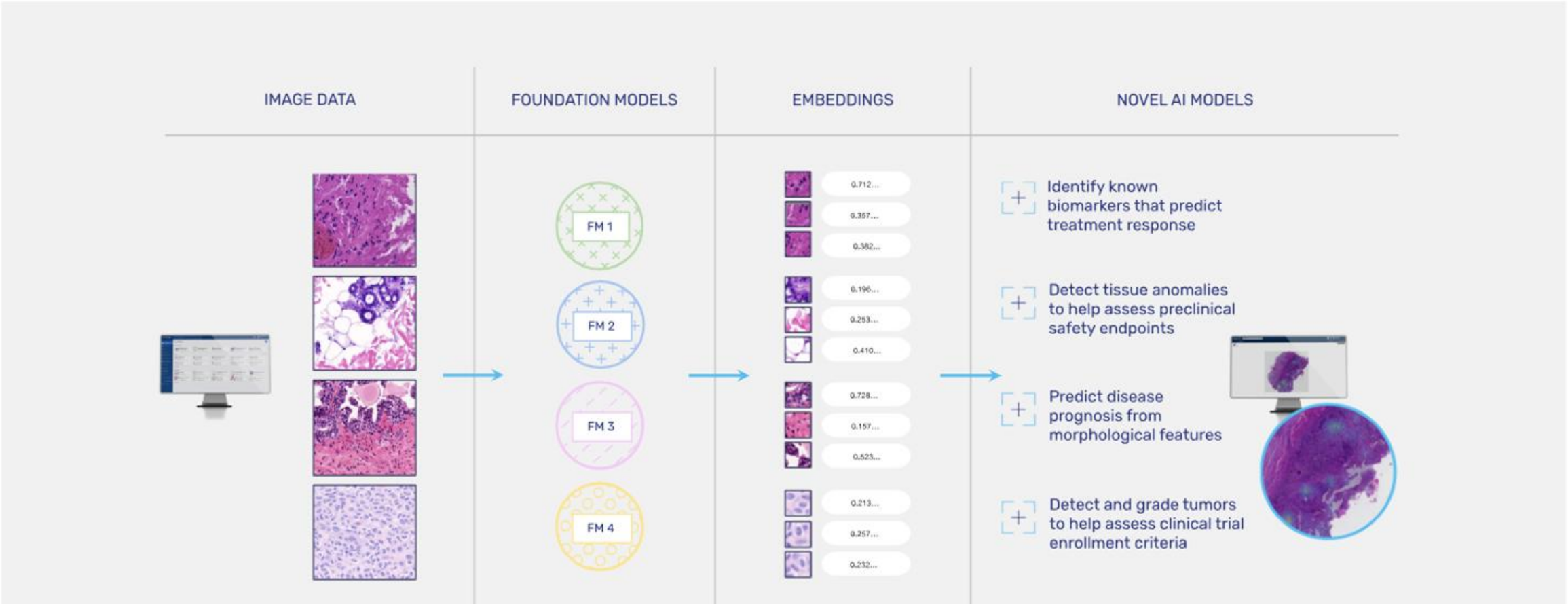


Example Colorectal Discorances Detected by AI-IQA

Pathologists	 ✗ Normal	 ✗ Normal	 ✗ LGD	 ✗ LGD
AI	 ✓ Hyperplastic	 ✓ Hyperplastic	 ✓ HGD	 ✓ HGD

DIAGNEXIA

Foundation Models Are Only The Beginning To Try And Digest the Vastness of Pathology

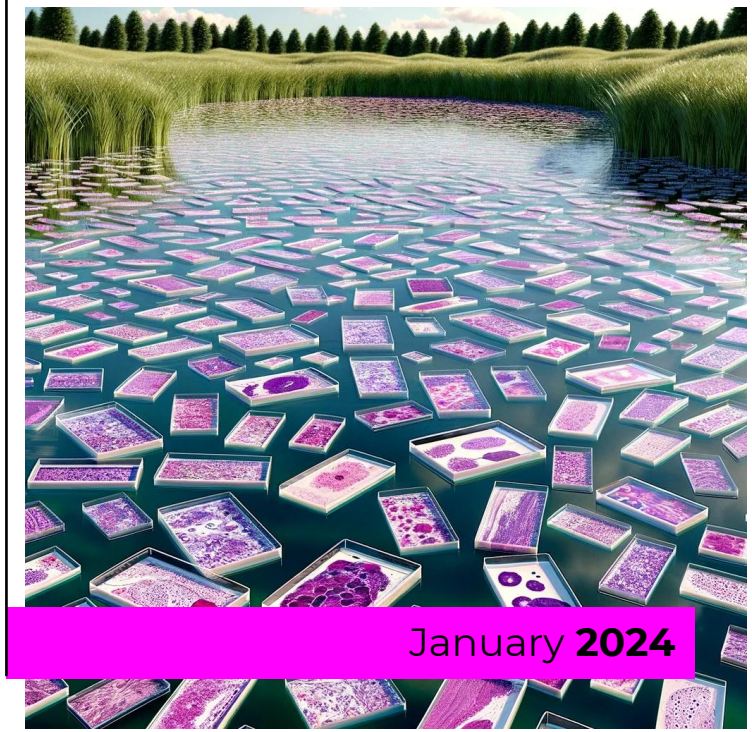


DIAGNEXIA

Data Access is Critical and Very Much Dictates Which Problems Can be Solved

Quality of data curation and labelling is essential for high performance, Diagnexia is uniquely positioned

January **2023**



January **2024**

January **2025**

DIAGNEXIA

Deciphex DT1 FM
Benchmarking well with best in class peer equivalents

Data Size

100,426 slides

100,130,900 tiles

Data Source

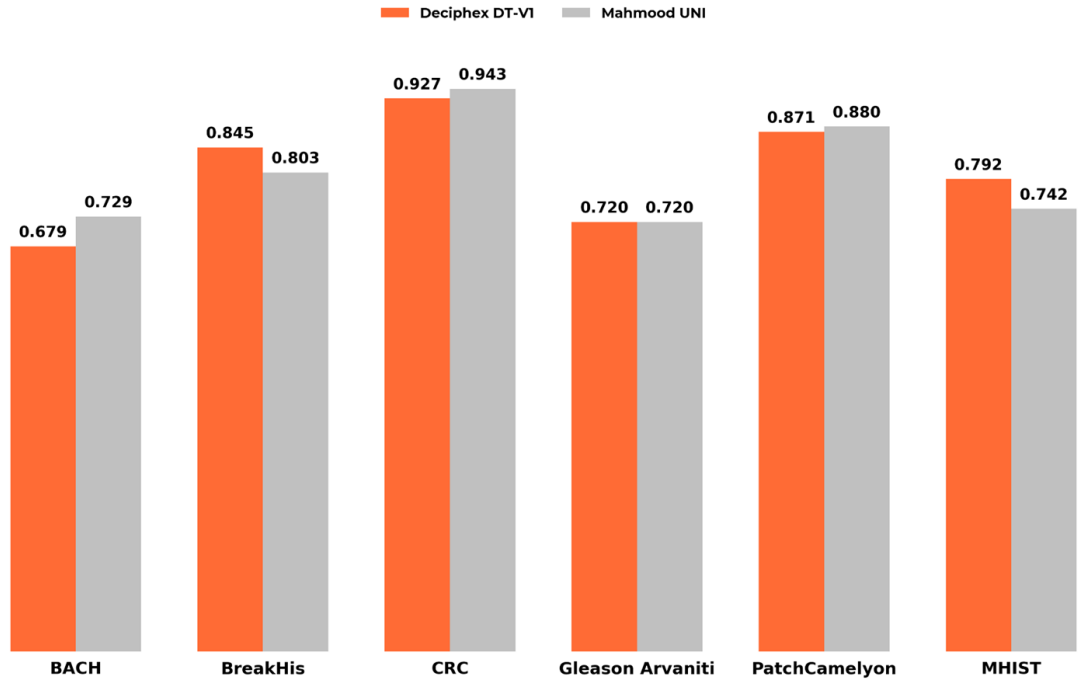
66% Diagnexia

33% The Cancer Genome Atlas Program (TCGA)

Technical Considerations

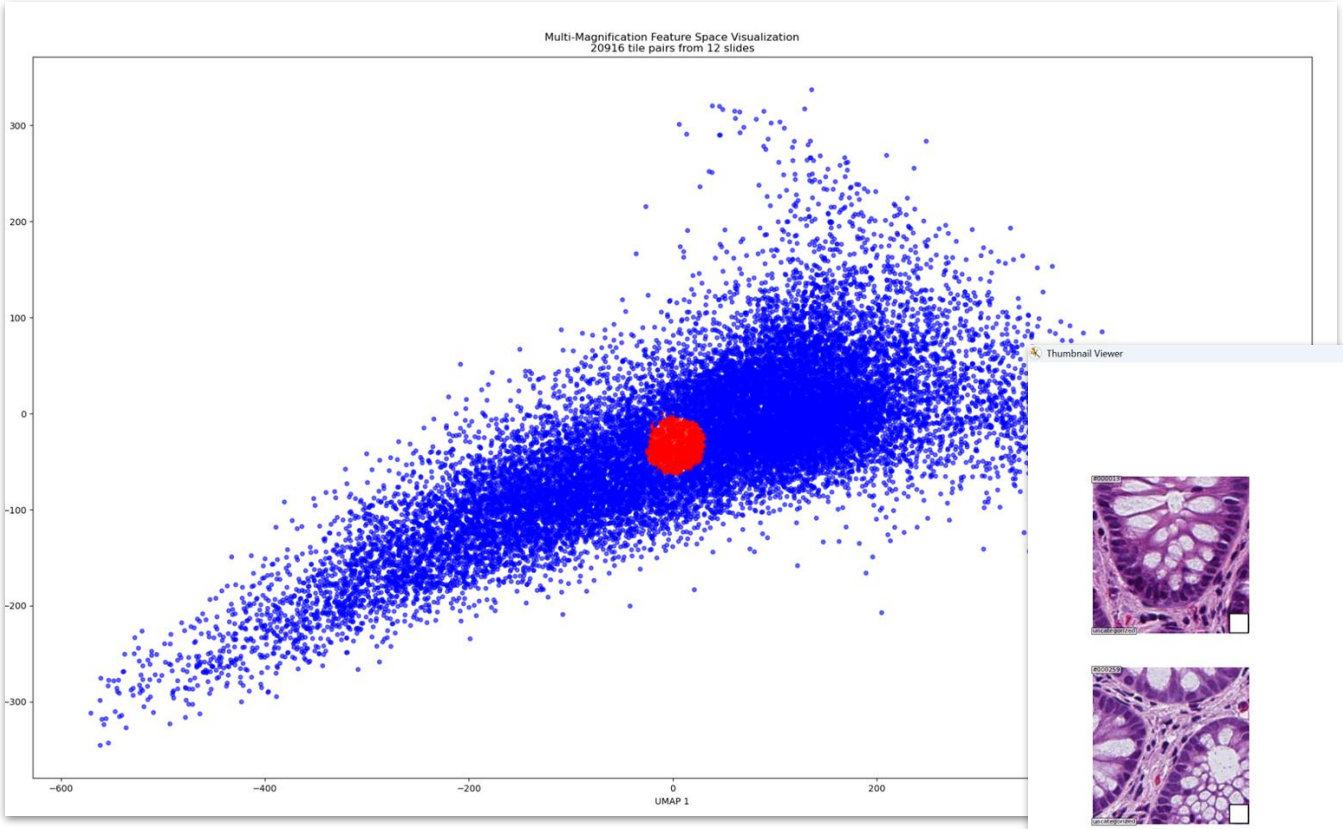
ViT-L/16 - Self Supervised Learning using DINOv2

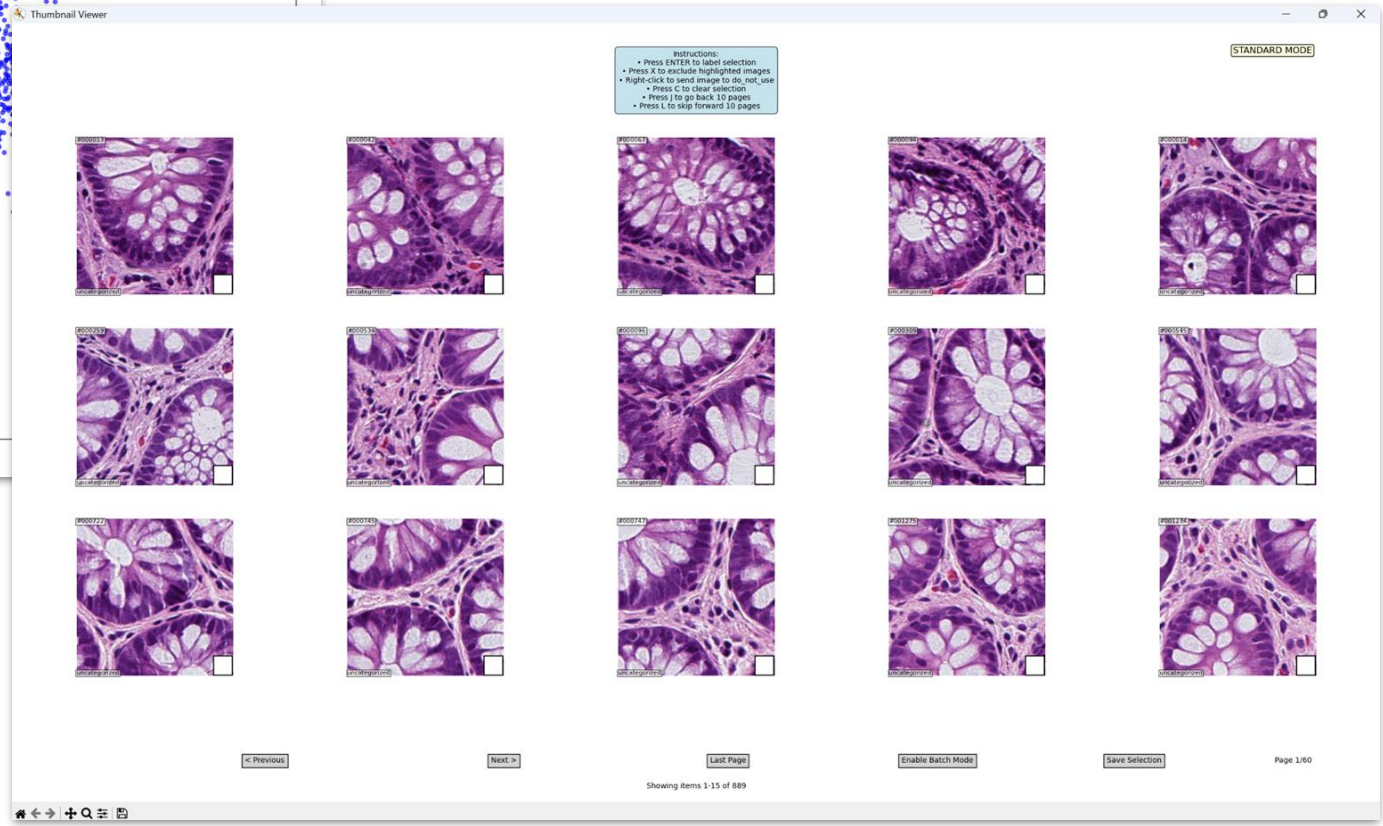
16 Nvidia H200



Dataset	Task	Tissue Type
BACH	Classification (4 classes)	Breast
BreakHis	Classification (4 classes)	Breast
CRC	Classification (9 classes)	Colorectal
Gleason Arvaniti	Classification (4 classes)	Prostate
PatchCamelyon	Classification (2 classes)	Breast
MHIST	Classification (2 classes)	Colorectal Polyp

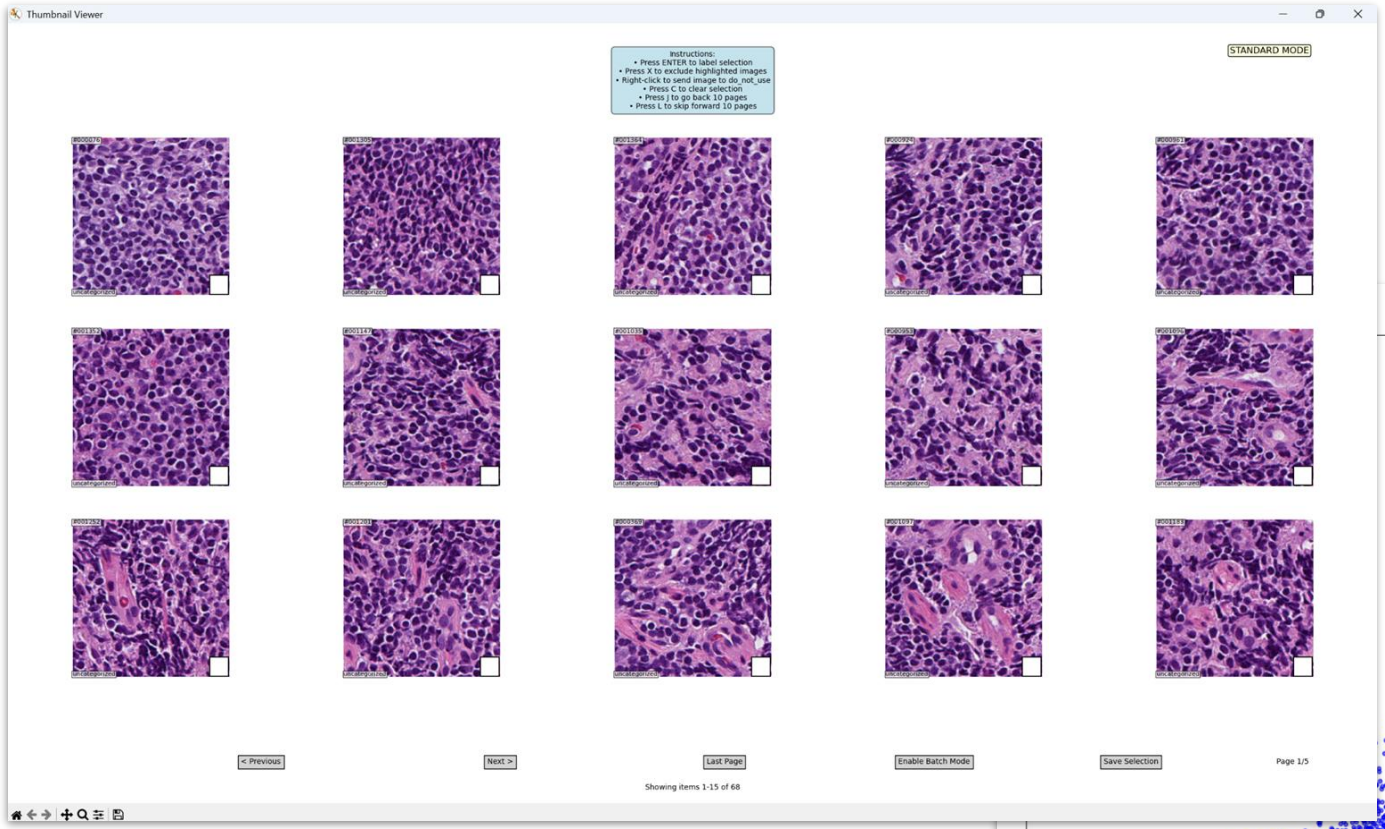
Turning Pathology into a Feature Map

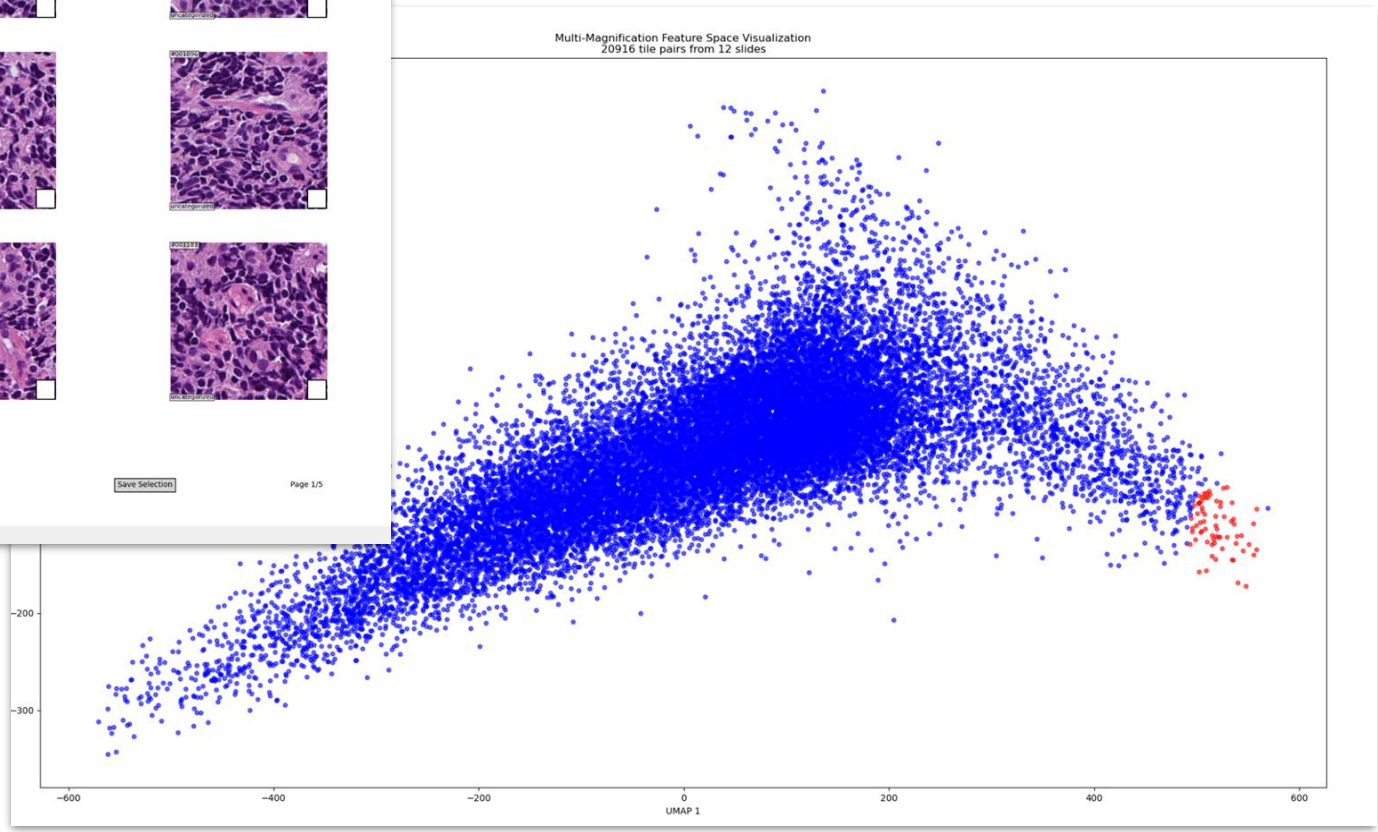




DIAGNEXIA

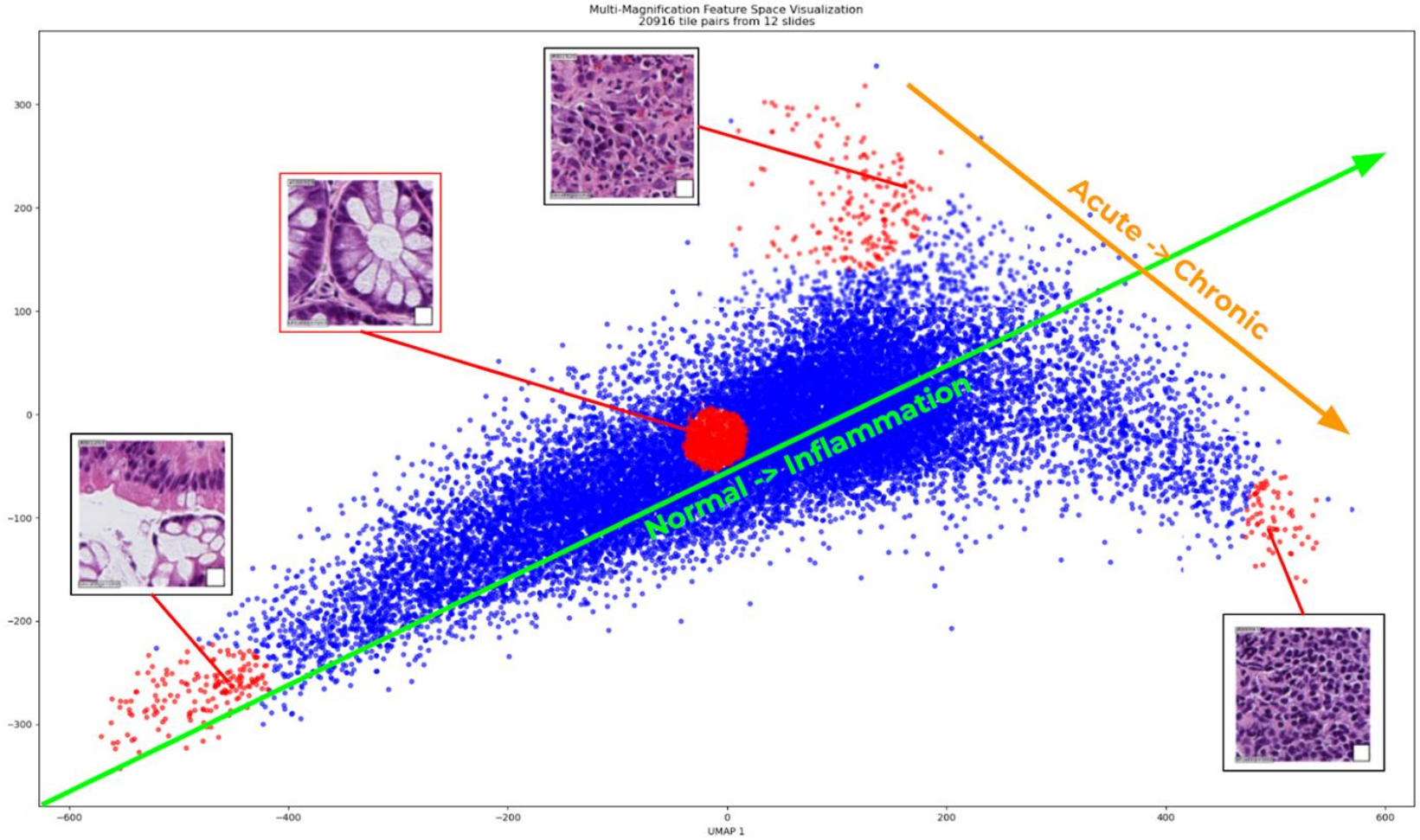
Turning Pathology into a Feature Map





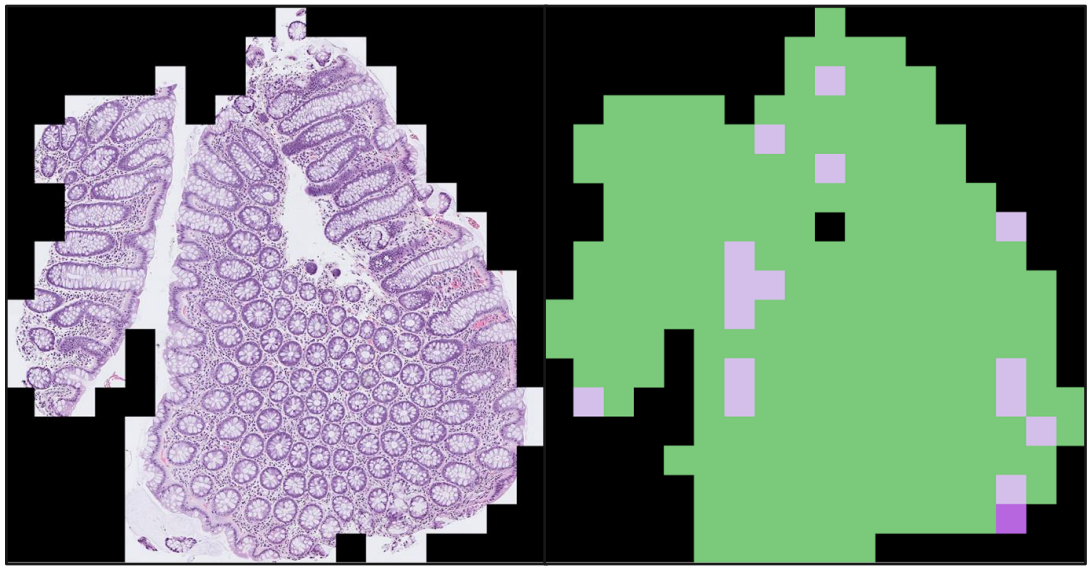
DIAGNEXIA

Turning Pathology into a Feature Map



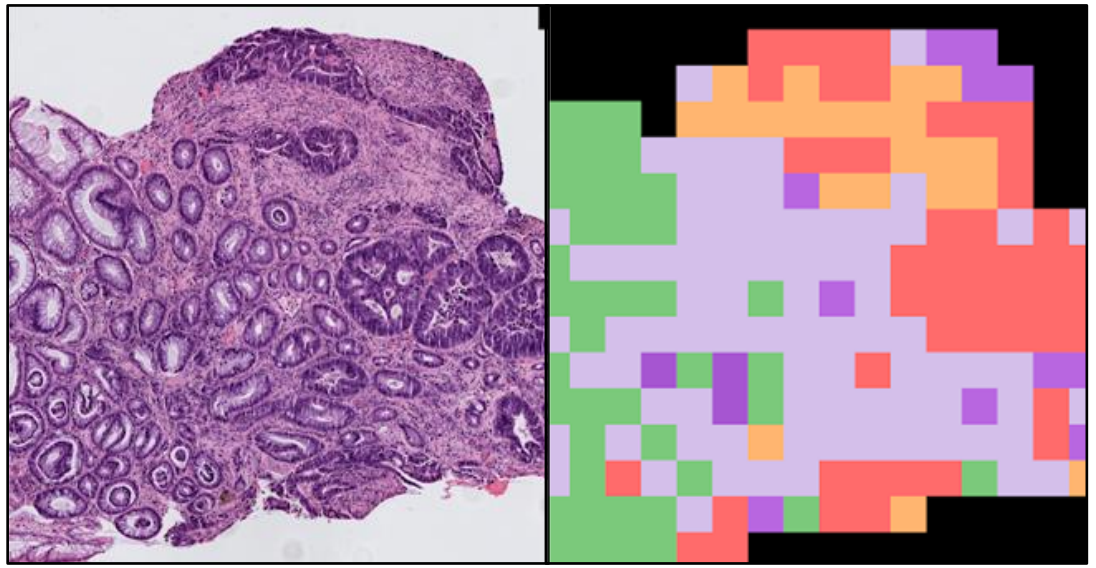
DIAGNEXIA

Spatial Distribution of Predicted Features Drive AI Descriptions of Morphology



“sections show the presence of normal intact colonic mucosa with underlying normal lamina propria. No evidence of acute inflammation.”

“sections show the presence of a moderately differentiated infiltrating adenocarcinoma with stromal desmoplasia”



DECIPHEX

Autopilot

PS

PRIORITY	STATUS	ACCESSION #	ACCESSION DATE	ORI. ACCESSION #	NAME	DOB	REFERRING CLINICIAN	REFERRING INSTITUTE	SUBSPECIALTY	INFORMATION	ANALYSIS
Urgent	Assigned	CRC-2024-003	14 Jan 2024	cancer003	**Elizabeth Rodriguez**	14 Jul 1952	Dr. James Anderson	Regional Cancer Center	**GI**		
Routine	Assigned	CRC-2024-002	12 Jan 2024	lgd002	**Robert Chen**	8 Nov 1958	Dr. Michael Thompson	University Medical Center	**GI**		
Routine	Assigned	CRC-2024-001	10 Jan 2024	normal001	**Maria Johnson**	22 Mar 1965	Dr. Sarah Mitchell	Metro General Hospital	**GI**		

Showing 3 of 3 cases

Pathologists Have To Remain At The Centre Of AI Enhanced Diagnostics

- Avoid Unintended consequences
- Careful process monitoring
- Introduce unintended bias
- Regulatory consideration
- Robust testing and validation
- Balanced data sets, stepwise introduction


Questions?

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SCAN ME

NHS
North West London Pathology

Lunch & Networking

NHS
North West London Pathology

Chair Afternoon Reflection

Saghar Missaghian-Cully
Managing Director
North West London Pathology

NHS
North West
London Pathology

CONVENZIS

Case Study

InterSystems®
Creative data technology

NHS
North West London Pathology

Case Study

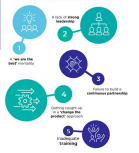
David Sims
Clinical Solutions Executive
InterSystems

NHS
North West
London Pathology

InterSystems
Creative data technology

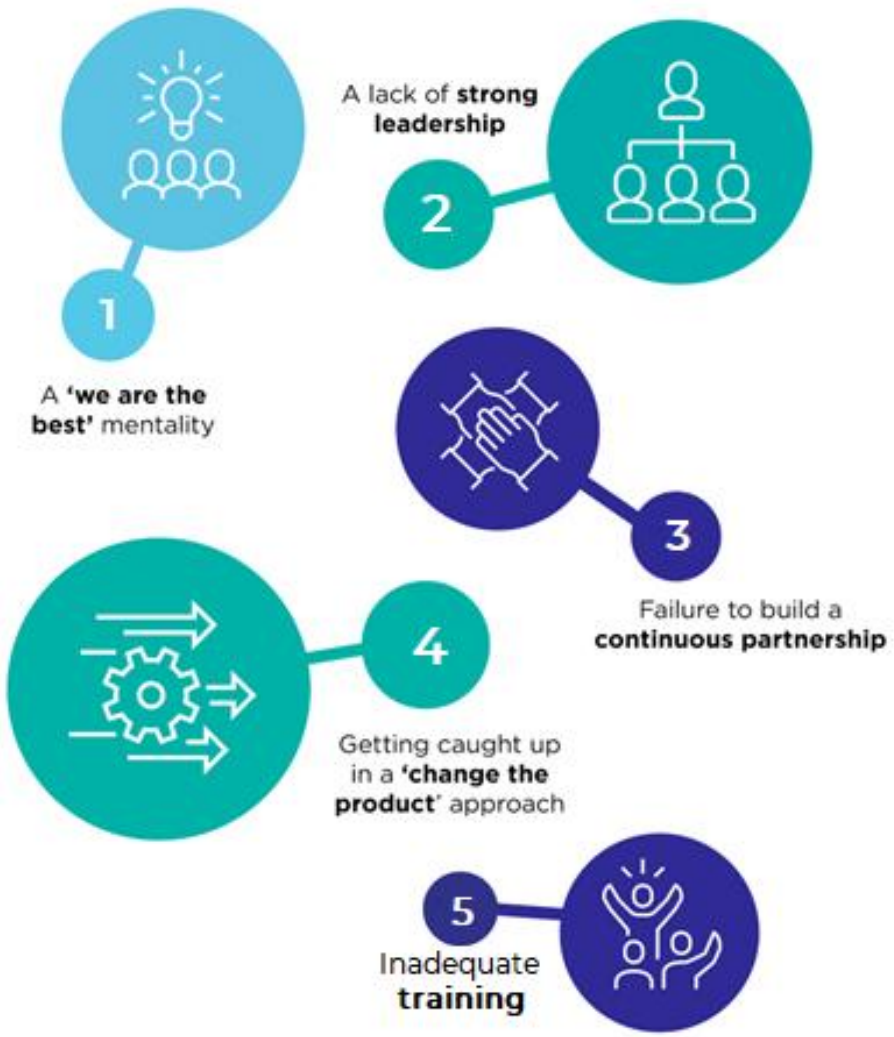
Barriers to a Successful LIMS Deployment and Adoption

David Sims
Clinical Solution Executive
InterSystems



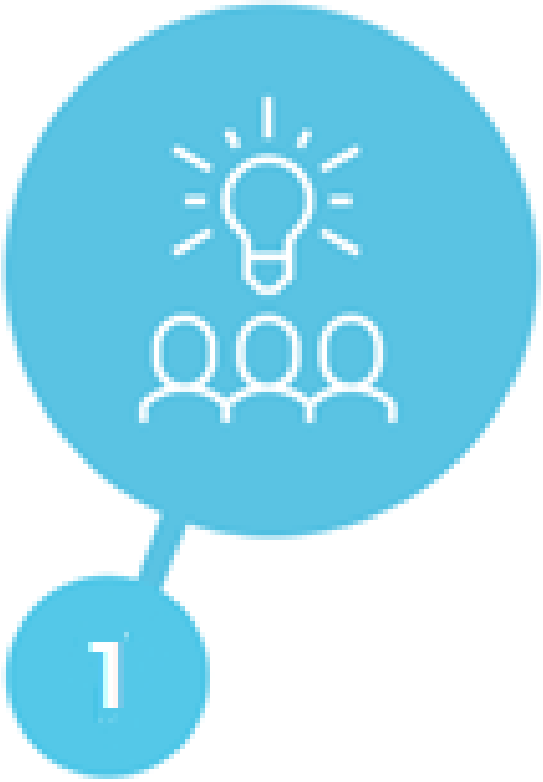
5 Barriers – Culture and People

- Its not just computers, software (and functionality)!
- Cultural and adaptive change



We are different!

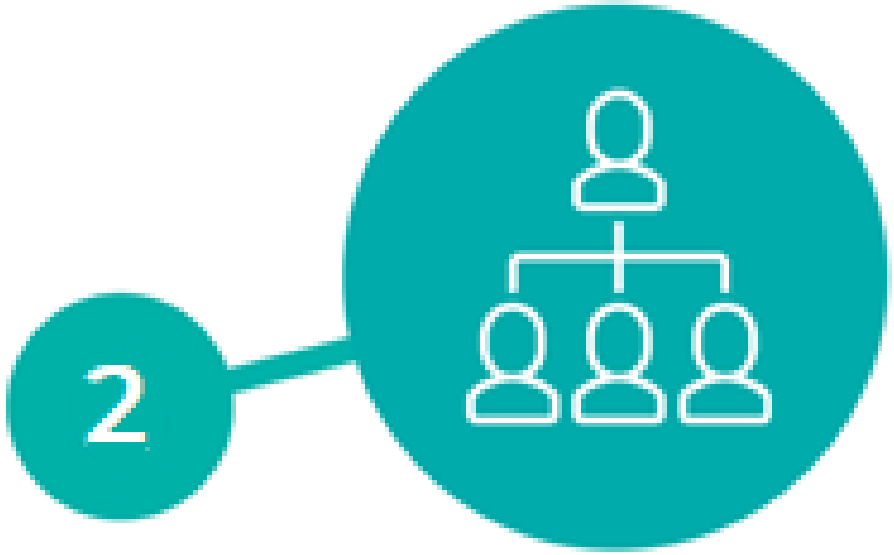
Challenge!



A ‘**We are the best**’ mentality

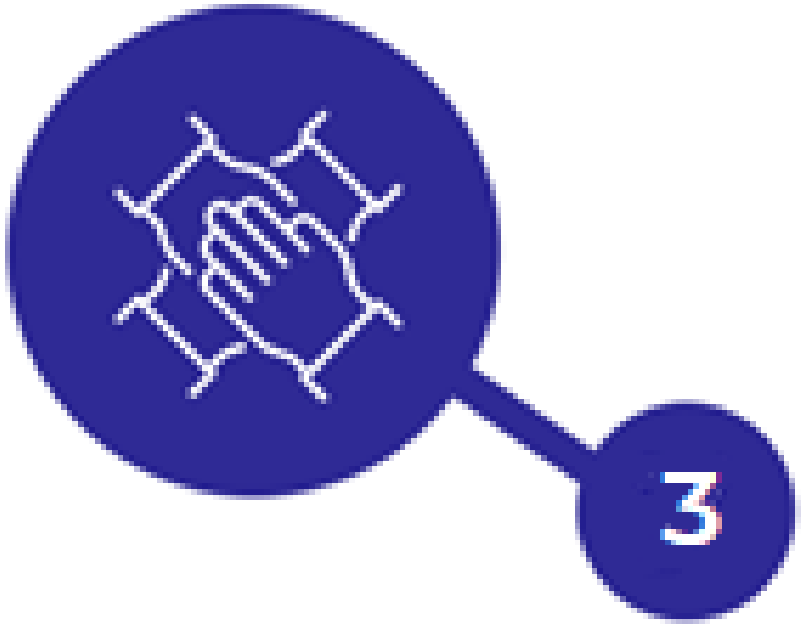
Who is the executive sponsor?

Are the right resources assigned?



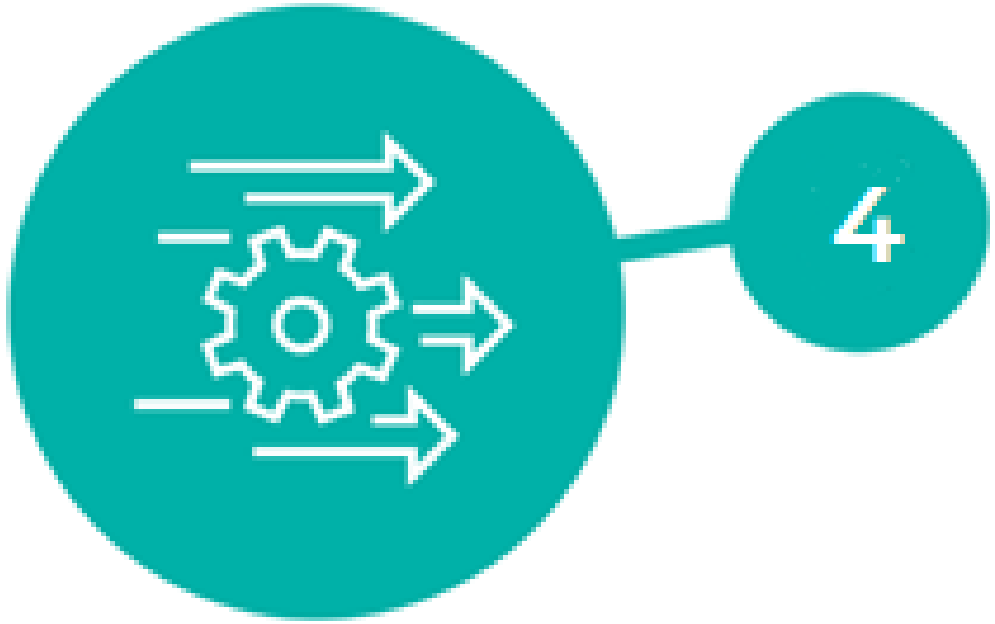
A lack of **Strong leadership**

Create a culture of proactivity, rather than reactive crisis management!



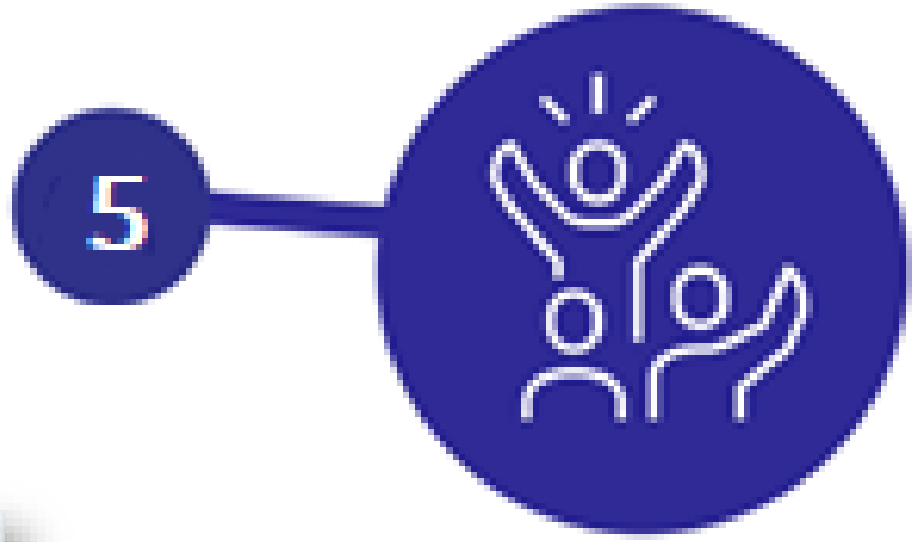
Failure to build a **continuous partnership**

Develop a '*work with what you have*' mindset!



Getting caught up in a '**change the product**' approach

Training is not a one-off! Don’t cut corners!



Inadequate **training**

“A successful IT deployment is not just technical — it’s cultural – embrace it!”

Dave Sims

For more information, please visit
intersystems.com/uk/industries/
healthcare-technology/

Thank you

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NHS
North West London Pathology

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Keynote Presentation

Dr Bernie Croal
President
The Royal College of Pathologists

NHS
North West
London Pathology

The Royal College of Pathologists
Pathology: the science behind the cure

Saying it How it Really is…..

July 1st 2025

Dr Bernie Croal

President - RCPath

The Royal College of Pathologists
Pathology: the science behind the cure

Government

Summary

- ***Good Intentions***
- ***Fiscally Handicapped***
- ***Financial Black Hole***
- ***Taxation/Borrowing/Backlash***
- ***Wars/Trump/Brexit/Austerity/Immigration/Reform***

Reviews, Plans and Actions

- *Long term workforce plan (1)*
- *Darzi Review*
- *10 Year Health Plan for England*
- *Long term workforce plan (2)*
- *Training Review/Leng Review*
- *NHSE Demise + "Bonfire of the Quangos"*
- *4 Nations – similar trajectory……..*

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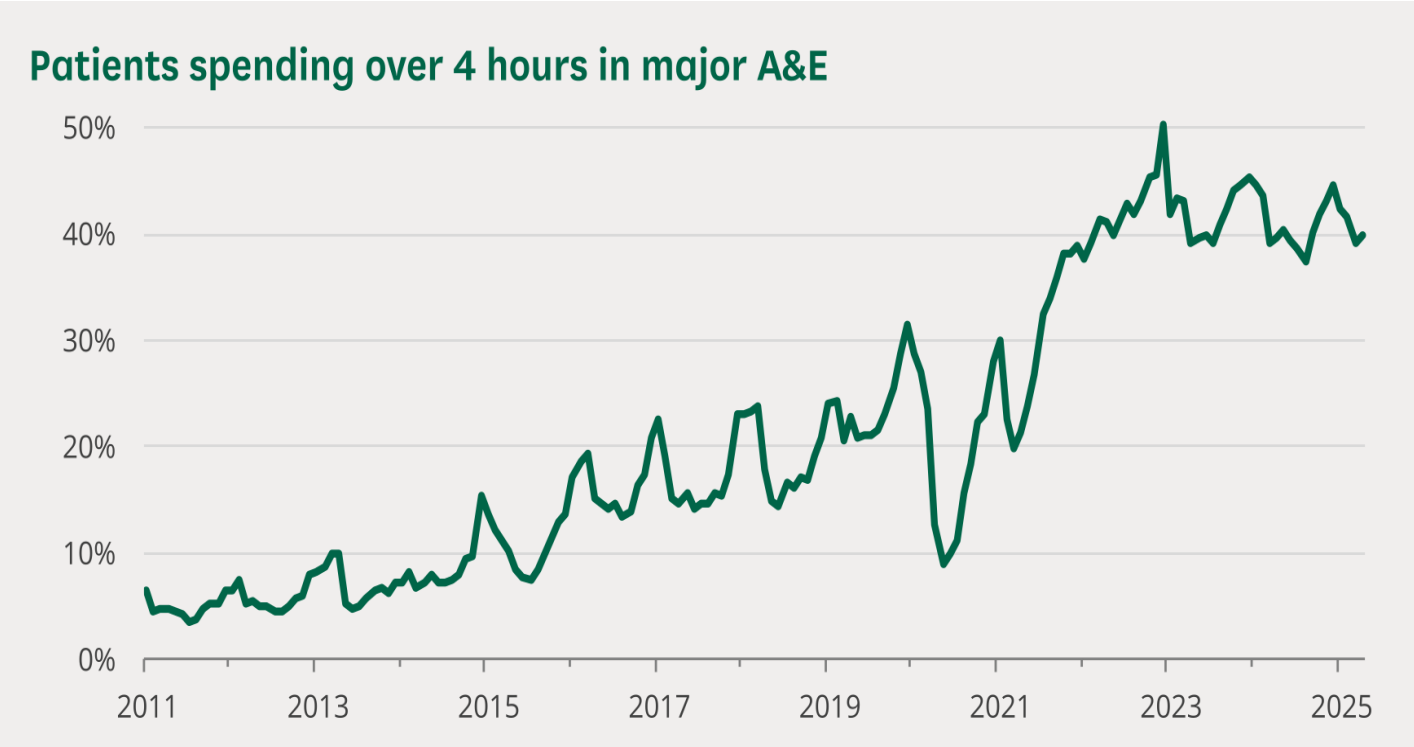
The NHS



Summary

- ***7.4M Waiting List***
- ***A&E Waiting***
- ***GP Access***
- ***Public – Low Confidence***
- ***Not All Bad……***
- ***Private Sector ?***

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10 Year Health Plan England

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Pathology: the science behind the cure

10 Year Health Plan

The NHS 10-Year Plan for 2025 is shaping up to be a bold reimagining of healthcare delivery in England, with three major shifts at its core:

From hospital to community: A strong emphasis on moving care closer to home, reducing reliance on hospitals by investing in community-based services, integrated care systems, and prevention.
From analogue to digital: Accelerating the use of digital tools—like AI diagnostics, remote monitoring, and electronic health records—to improve efficiency, access, and patient empowerment.
From sickness to prevention: A pivot toward proactive health management, with greater investment in public health, early diagnosis (especially in cancer and cardiovascular disease), and tackling health inequalities.

Diagnostics, in particular, are expected to benefit from:

- Expanded community diagnostic centres.
- Faster access to imaging and pathology services.
- Greater use of AI and digital platforms to streamline workflows and reduce backlogs.

The plan also highlights **cutting waiting times**, **improving urgent and emergency care**, and **boosting primary care access** as immediate priorities. And with a tight fiscal backdrop, there's a clear push for **efficiency and accountability** in how NHS resources are used.

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10 Year Health Plan

Themes

- ***3 Shifts – Prevention, Community, Digital***
- ***Neighbourhood Health Service***
- ***Single Patient Record/NHS App***
- ***No more money…… 3%..... 103%***
- ***Workforce – 10yr workforce plan***
  - ***Training review/governance – big shake up?***
  - **Non Medical expanded scope roles**

10 Year Health Plan

Pathology

- ***No explicit mention***
- ***No defined budget additional for workforce/IT***
- ***3 Shifts***
- ***Does not cover all that we do***
- ***No implementation plan or budget***
- ***Future workforce and spending reviews important***

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Pathology Workforce

- ***Pathologists***
- ***Clinical Scientists***
- ***Biomedical Scientists***
- ***IT/Bioinformatics***

- ***External***
  - ***Private***
  - ***Industry/Tech***
  - ***Supply Chain***

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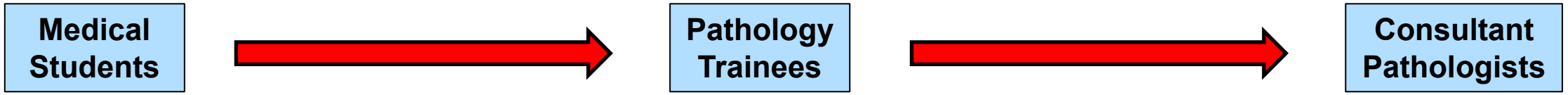
Workforce Flow



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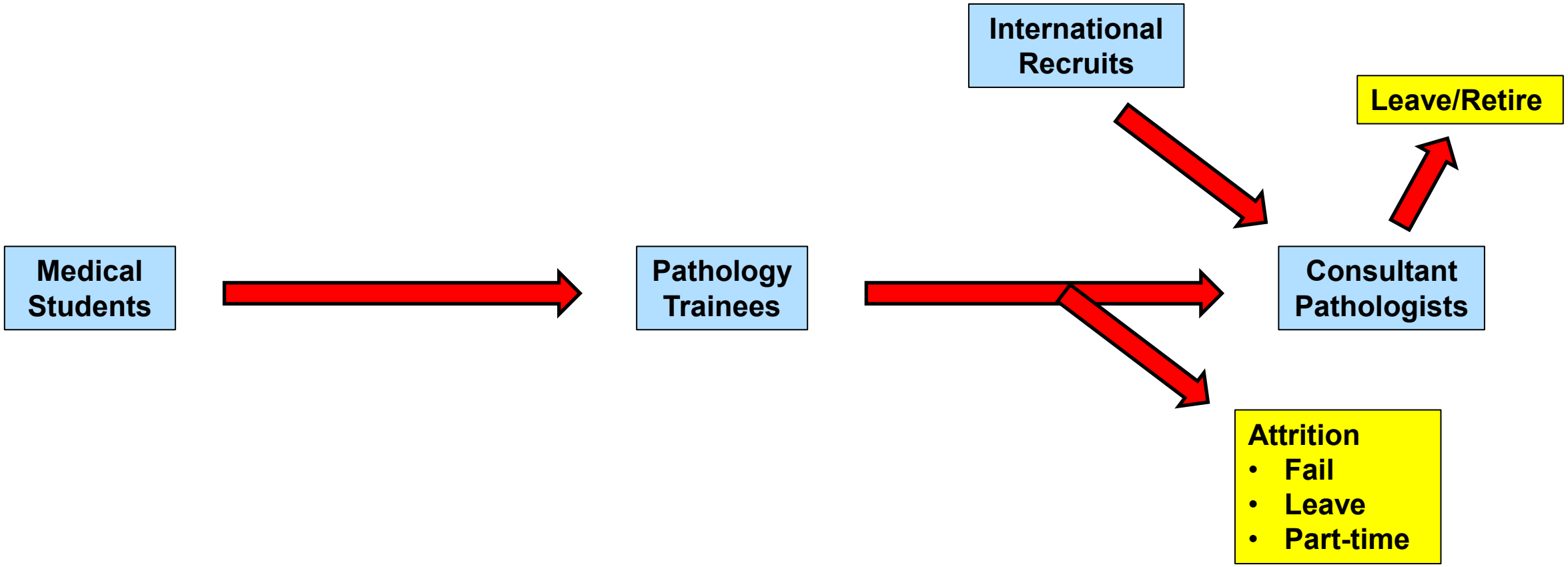
Workforce Flow



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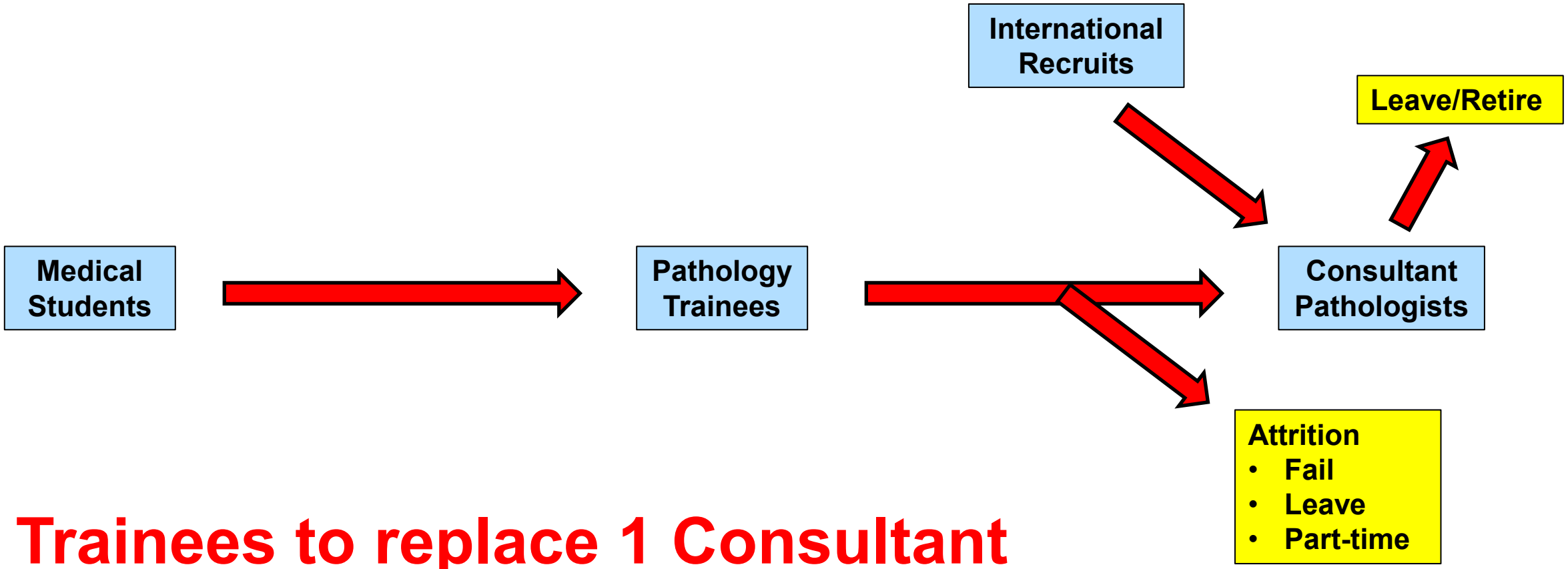
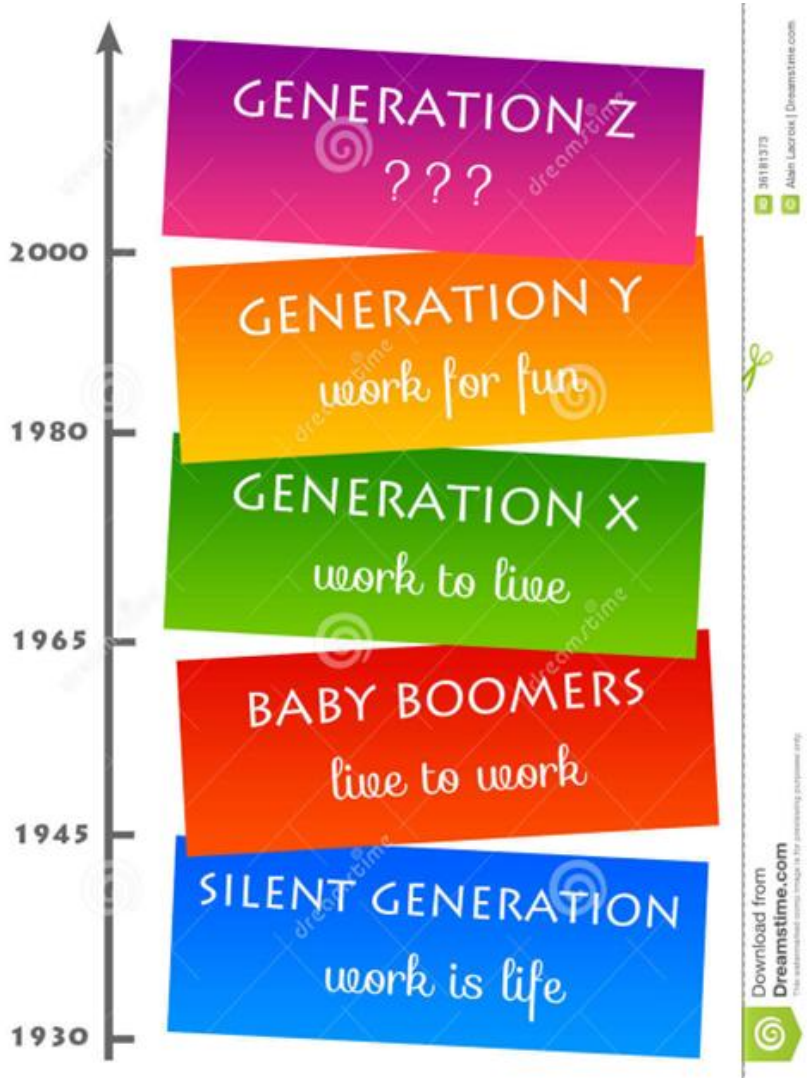
Workforce Flow



2 Trainees to replace 1 Consultant


elcome to DGRI
NHS
STUDENTS


GENERATION Z
???
GENERATION Y
work for fun
GENERATION X
work to live
BABY BOOMERS
live to work
SILENT GENERATION
work is life
2000
1980
1965
1945
1930
Download from
Dreamstime.com

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Service Failure

Paed & Perinatal Pathology

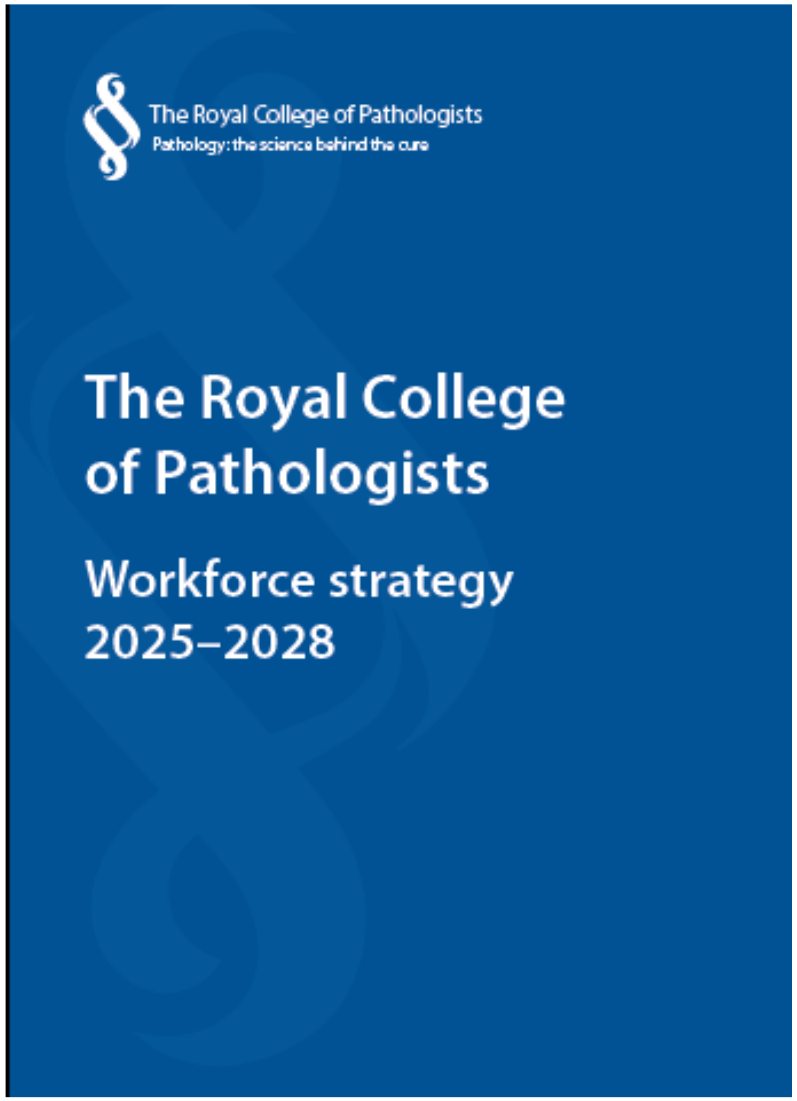
- *37% Consultant Vacancy*
- *Birmingham, Bristol, Northern Ireland - None*
- *23% Retiring next 5 years*
- *13 trainees but no recruitment 2025*

Immunology

- *40% Consultant Vacancy*
- *Risk to Allergy services and Immunodeficiency*
- *32% will retire next 5 years*
- *Need 50 additional posts to meet demand*

Workforce Strategy

- Train – Collaboration/lobbying
- Retain – wellbeing/lobbying
- Reform – workforce/Automation/ Digital/IT/AI
- Contingency – When Demand > Capacity
  - Diagnostic Stewardship
  - Hard choices



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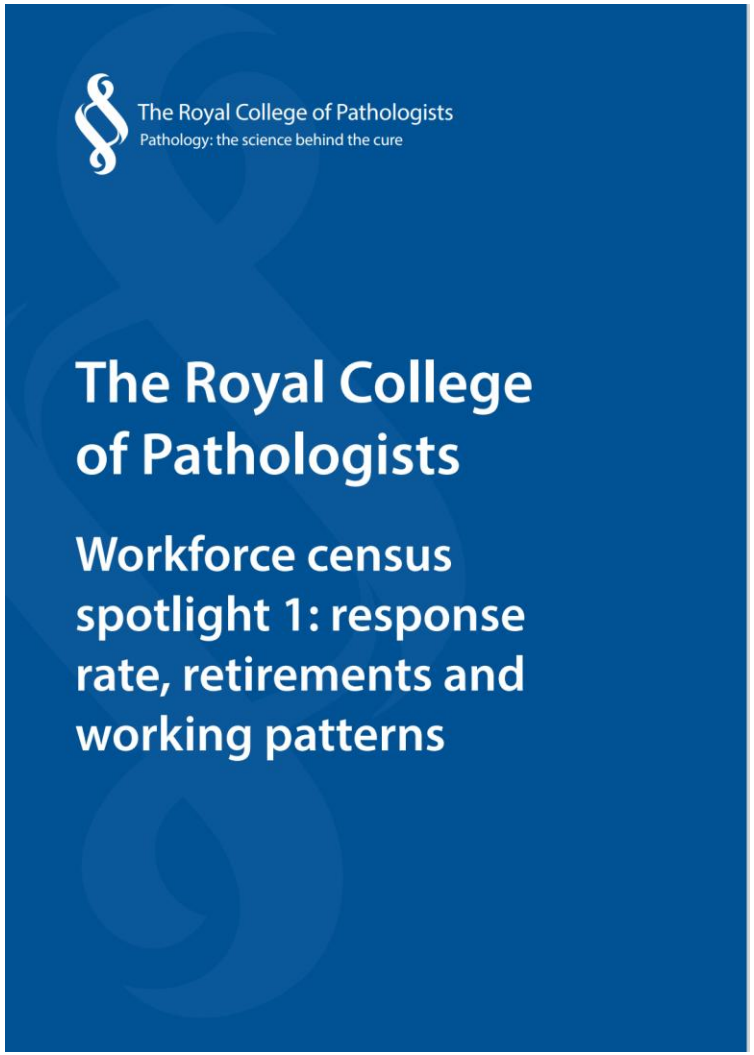
Retention



- ***Average retirement age 63***
- ***47% of pathologists > 50yrs***
- ***Senior Consultants >11PAs***
- ***60% > contracted hours***
- ***40% want to reduce hours***
- ***Pension issues……..***

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Workforce Summary

- *UK/World Crisis*
- *No workforce planning*
- *Lack of funding to expand training*
- *Retention not happening*
- *Reform options – slow and expensive*
- *Contingency – reduce demand*

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Tech?

- ***Digital Pathology ?***
- ***Coding/Interoperability ?***
- ***AI ?***
- ***Automation ?***
- ***More Consolidation?***

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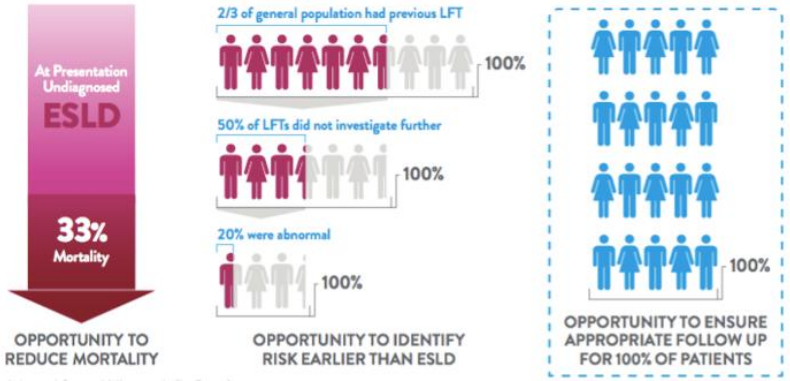
Digital Pathology and AI



The Royal College of Radiologists

The Royal College of Pathologists
Pathology: the science behind the cure

Embracing AI to support the NHS in delivering early diagnoses

Report from a meeting at 10 Downing Street, 30 October 2023

Background

On 30 October 2023, the Royal College of Radiologists (RCR) and the Royal College of Pathologists (RCPath) co-chaired a meeting at 10 Downing Street to discuss the role of artificial intelligence (AI) to support the medical workforce in delivering early diagnoses.

Radiologists are specialist doctors who interpret medical images to diagnose, monitor and treat disease. Pathologists play a critical role in the diagnosis of disorders affecting every organ of the body, from before birth to after death. 95% of clinical pathways within the NHS rely on pathology services, with millions of tests performed every day.[1] These two diagnostic specialties are at the forefront of adopting AI into the NHS.

Following introductions by the previous Secretary of State for Health and Social Care, Steve Barclay MP, Dr Katharine Halliday, President of the RCR, and Dr Bernie Croal, President of the RCPath, there were a series of presentations on the use of AI in radiology and pathology. These were followed by an open discussion. Presentations were delivered by: Professor David Baldwin, Adviser to the UK National Screening Committee; Dr Ellie Dow, Consultant in Biochemical Medicine, NHS Tayside; Dr Hugh Harvey, Managing Director, Hardian Health; Dr Tim Horton,Assistant Director, The Health Foundation; Dr Anne Kinderlerer, Digital Health Clinical Lead, Royal College of Physicians; Dr Qaiser Malik, Medical Director, Membership and Business, RCR; and Professor Darren Treanor, Digital Pathology Lead, RCPath.

NHS services are under serious pressure, so it is vital that we embrace innovation that could boost capacity. Tackling bottlenecks at the diagnosis stage will help patients receive treatment faster. AI could facilitate this, leading to shorter waiting lists and better outcomes for patients. Nonetheless, much needs to be done if we want to realise the benefits of AI.

Radiology

Radiology is at the forefront of AI in the NHS, with many applications already in use. Demand for diagnostic tests is far outstripping workforce growth, with a 29% shortfall in the consultant workforce.[2] AI holds much promise to help solve this problem. It could be used to highlight abnormalities on medical images, or to prioritise those images a radiologist should review immediately. However, several factors need to be addressed to allow for AI's adoption into radiology services at scale.

[1] National Institute for Health and Care Excellence (2021), "NICE impact diagnostic pathology". Available at: https://rb.gy/zefb37

[2] RCR, Clinical Radiology 2022 Workforce Census. Available at: https://rb.gy/c7xv9b

The Royal College of Pathologists
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Tech?

- ***Digital Pathology ?***
- ***Coding/Interoperability ?***
- ***AI ?***
- ***Automation ?***
- ***More Consolidation?***

The Royal College of Pathologists
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Conclusions

- ***NHS Gridlock***
- ***Workforce Crisis***
- ***Huge Tech/IT Gap***
- ***Unwarranted Variation in Pathology Tests***
- ***Service Failure***
- ***Limited Increases in Funding***

The Royal College of Pathologists
Pathology: the science behind the cure

Actions

- ***Lobby/Advocate workforce***
- ***Reduce Demand & Unwarranted Variation***
- ***Contingencies – Manage failing services***
- ***Develop and adopt coding/Interoperability standards***
- ***Roll out Digital Pathology – Important***
- ***AI – Image and Cascade Testing - ?£££***

Thank You

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Case Study

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NHS
North West London Pathology

Case Study

Telmo Costa
Global Product Lead BCM
Noul Co LTD

NHS
North West
London Pathology

noul
Beyond Diagnostics

Noul and miLab product platform

Caroline Fenlon UK Business Development Manager
Telmo Costa Global Product Manager BCM

1st July 2025

noul Beyond Diagnostics

Noul, Redefining Possibilities

noul
Beyond Diagnostics

"We explore global challenges that threaten human health and life, discover novel potential solutions and realize those possibilities."

Company Overview

Name	Noul Co., Ltd.
Establishment	Dec. 2, 2015 (IPO KOSDAQ Mar. 3, 2022)
CEO	David Lim
Capital	KRW 18,474 million
Employees	137 persons
Location	Yongin-si, Gyeonggi-do, Korea
Key products	Blood analysis, malaria diagnosis, cervical cancer screening, etc.
Website	www.noul.com

[As of Oct. 31, 2024]


Headquarters


Research lab (HQ)


Plant (HQ)

*Applications 20 Registrations 67

Key Milestone

Global Partners & References	**100+ partners and references across 25 countries** Government/international organization : WHO, UNDP, FIND, US CDC, KCDC,Italy, Spain, etc. Global company : Largest diagnostic labs in North America/Europe/Latin America, Novartis, and others
Certification	**CE, GMP, ISO 134865, FDA** ISO 13485(BSI) (2018) Achieved the European CE certification for miLab devices and malaria/blood analysis/cervical cancer diagnostic cartridges (2022) miLab platform achieved the European CE IVDR certification for SafeFix GMP certification for Class 1 IVD medical devices (2023) Achieved ISO 13485 (3EC) for IVD medical devices in hematology & cytology Noul miLab™ Platform added to FDA Registration & Listing (2024)
Publications	**87 Publications** **(Including Nature Review,** More than **60% Overseas)** 2019~21 Nature Reviews Materials/IEEE Conference/ACS 2023 Frontiers in Bioengineering and Biotechnology 2024 PLOS Global Public Health, Frontiers, Scientific data
Award	Award at the **Bill & Melinda Gates Foundation** Annual Meeting (2019) Prime Minister's Award on 57th Invention Day KIPO Commissioners' Award at the Korea Patent Awards Top 10 AI Startups in Korea named by NIA Next-generation Unicorn named by the Ministry of Science and ICT
Clinical Trials	**Clinical trials across 20+ global sites for 10,000+ cases** Swiss TPH, FIND, Harvard Medical School, Asan Medical Center, Severance Hospital, etc. RIGHT Foundation's 'Bridging Award Program' (KRW 4 billion) (2023)

Noul's Groundbreaking Technologies

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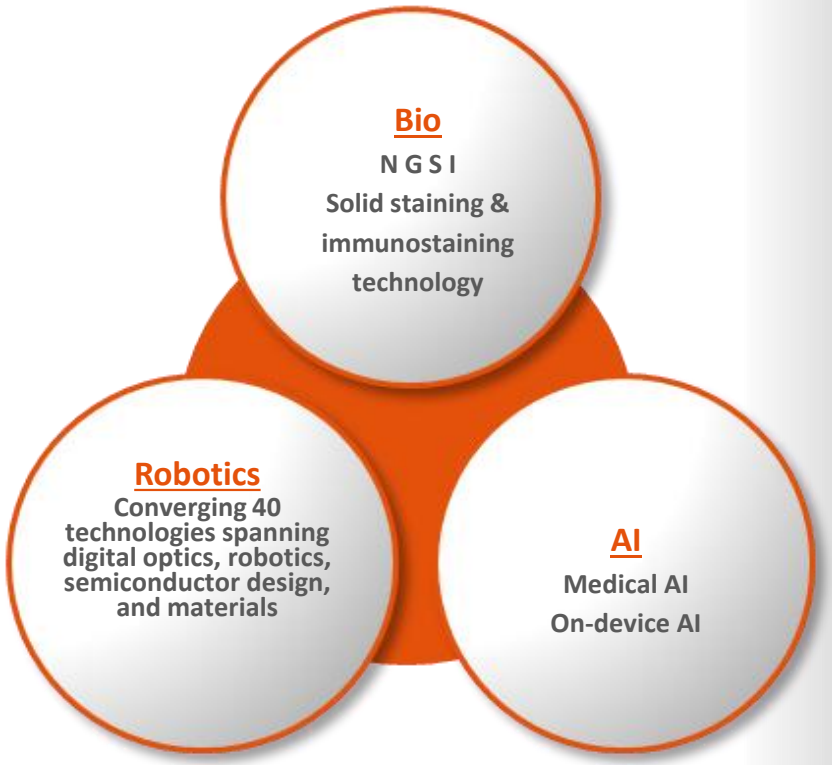
Beyond Diagnostics

With proprietary expertise in BIO, AI, and Robotics, Noul advanced technologies in hematology, oncology, all driven by innovative in-house capabilities and manufacturing.

Technology



Products

	Device	Cartridge	AI
Hematology		BCM Blood analysis MAL Malaria	
Oncology		CER Cervical cancer	
S/W analysis program	AI analysis solution	Viewer	

miLab™ The world's first AI-Powered diagnostic lab

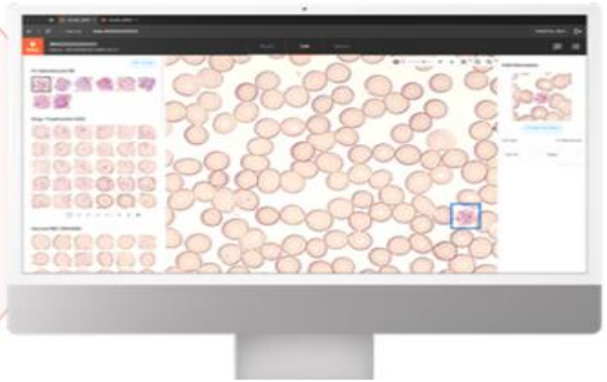
noul
Beyond Diagnostics

The world's only platform automating the entire microscopic process described by UNITAID as *the most advanced digital microscope and fully integrated benchtop platform.**

User-centric
Digital Analyzer

All-in-one
Platform Device

Platform device



miLab

Smart
Cartridge

* Malaria Diagnostics Market and Technology Landscape Report 4th. UNITAID (2022)

Our Innovation - Overview

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Beyond Diagnostics

"Improved diagnostic accuracy and consistency, simplified workflow"

Fully-Automated Sample Preparation

Smearing and staining in one step, with solid-based staining cartridge

Capturing High-Resolution Digital Images

More than 500 cell images per second, with high-performance digital microscopy

Analyzing with AI Algorithms

Faster, more consistent and accurate results with AI, compared to manual microscopy

Verifying Results with Remote Access

With network access, view and monitor results anytime, anywhere

Our Innovation - miLab Platform

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Beyond Diagnostics

With its on-device AI, miLab™ can provide reliable microscopy test results anytime and anywhere.

Digital Microscopy Platform, miLab™

miLab™

Solid-based Staining
Cartridge

All-in-one
Device

Remote Access
Viewer

Fully Automated Workflow

Value Proposition

Work Efficiency
for Pathologists
(AI decision Support → Less Turnaround Time)

Quality Reliability
for Technicians
(Automation → Less Human Error)

Cost Saving + Fresh Sample
for Patients
(On-site Result → Reduce Patient's visit)

miLab™ A Comprehensive portfolio

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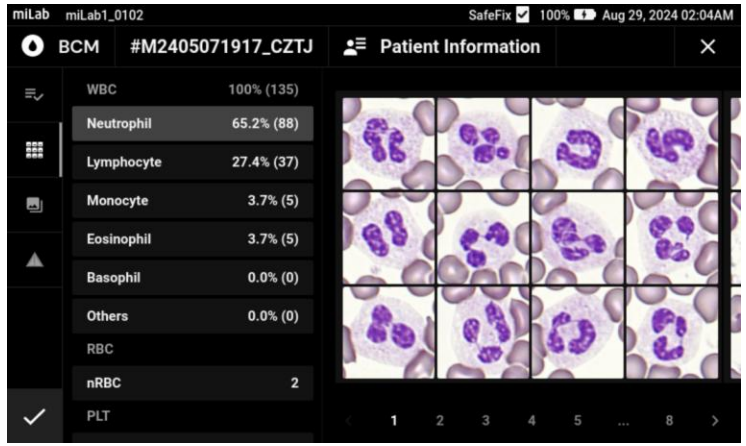
Beyond Diagnostics

Offers three AI-driven solutions: hematology and cytology, all fully automated and meticulously designed to enhance efficiency and deliver exceptional performance.

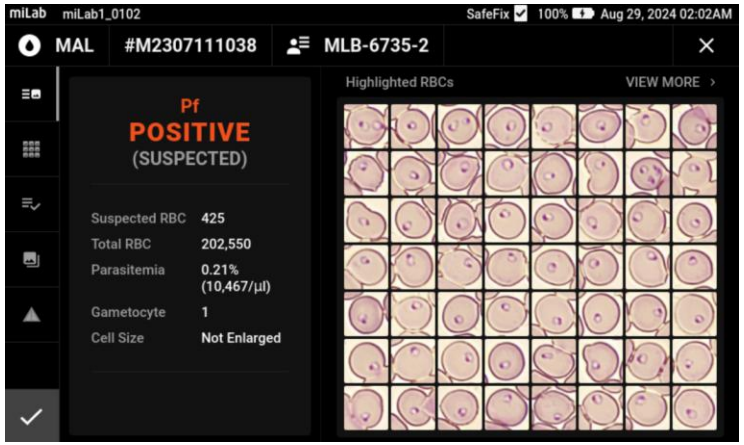
Blood Count & Morphology



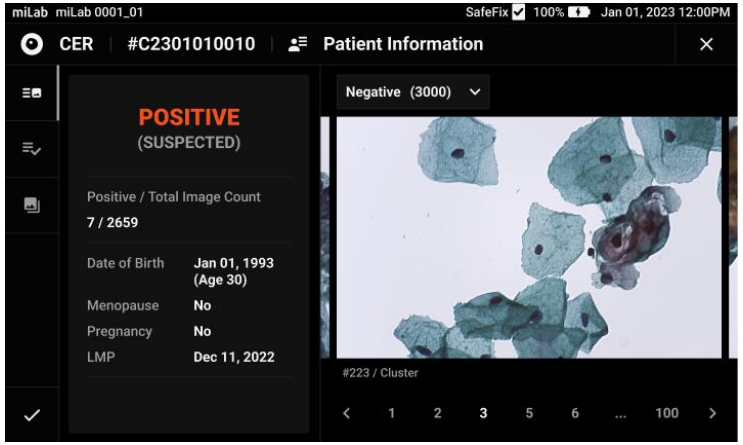
Only automation solution available for all medical institutions performing blood tests

•Currently expanding business to target hospitals and labs performing 20 or fewer BCM tests/day

Malaria



Digital Cytology for Cervical Cancer



miLab™ MAL

Product Introduction, miLab MAL

miLab™ MAL is an AI-driven fully automated solution that delivers WHO-certified Level 1 microscopy expert-level performance without the need for professionals

miLab™ MAL is globally recognized innovation

UNITAID introduced miLab as ***"The most advance digital microscopes and fully integrated bench top platforms"****

* Malaria Diagnostics Market and Technology Landscape Report 4th. UNITAID (2022)

Clinical Performance

- **Ghana & Ethiopia** (PLOS Global Public Health Journal, Apr. 2024)
  - (*P.f*) Sensitivity 94.3%, Specificity 94.0%
  - (*P.v*) Sensitivity 97.0%, specificity 97.6%
- **Nigeria** (under publication process)
  - (*P.f*) Sensitivity 94.4%, Specificity 98.1%
- **United States** (ASM Journal of Clinical Microbiology, Dec 2024)
  - (Imported cases) Sensitivity 99.5%, Specificity 100%

Plan on PPC(Preferred Product Characteristic) for digital malaria microscopy is included in WHO GMP Operational Strategy 2024-2030

miLab MAL in Malaria High-Endemic Setting

User Profile

- Country: Ghana and Ethiopia (2022)
- Research Institute: University of Notre Dame (USA), KNUST (Ghana), Gondar University (Ethiopia)
- Test Method for the Field Study: miLab, RDT, microscopy, qPCR
- Test setting: Level 1 & Level 2 Health Center

PLOS GLOBAL PUBLIC HEALTH

RESEARCH ARTICLE

A digital microscope for the diagnosis of *Plasmodium falciparum* and *Plasmodium vivax*, including *P. falciparum* with *hrp2/hrp3* deletion

Yalemwork Ewnetu[1,2], Kingsley Badu[3], Lise Carlier[4], Claudia A. Vera-Arias[5], Emma V Troth[5], Abdul-Hakim Mutala[3], Stephen Opoku Afriyie[3], Thomas Kwame Addison[3], Nega Berhane[1], Wossenseged Lemma[6], Cristian Koepfli[5]*

1 Department of Medical Biotechnology, Institute of Biotechnology, University of Gondar, Gondar, Ethiopia, **2** University of Gondar Comprehensive Specialized Hospital, Gondar, Ethiopia, **3** Department of Theoretical and Applied Biology, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, **4** LMC Projects, Amsterdam, The Netherlands, **5** Department of Biological Sciences & Eck Institute for Global Health, University of Notre Dame, Notre Dame, Indiana, United States of America, **6** Department of Medical Parasitology, School of Biomedical and Laboratory Sciences, Collage of Medicine and Health Sciences, University of Gondar, Gondar, Ethiopia

* ckoepfli@nd.edu

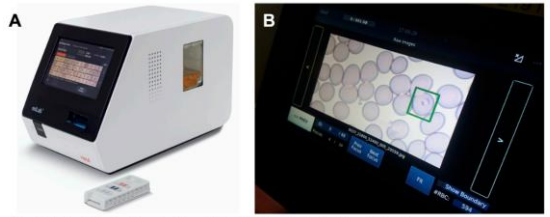


Fig 1. miLab device. A) Device with cartridge in front. B) Infected RBC detected by the algorithm and displayed on screen.

https://doi.org/10.1371/journal.pgph.0003091.g001

Result Summary

- Sensitivity and Specificity for **P. falciparum** the miLab reached **a sensitivity of 94%** and **a specificity of 94%** in both Ghana and Ethiopia.
- **Sensitivity for P. vivax** in Ethiopia was **97%**
- The miLab diagnosed 51/52 P. falciparum infections with hrp2 deletion (48/51 also carried hrp3 deletion).

*"**Patients can be treated quickly with accurate diagnostic tests.** There are many cases of finding malaria-infected patients on the miLab that local experts have not found in Ethiopia's clinical sites. miLab is **easy and simple to use, it's a must-have product in the clinical field**."*

by Cristian Koepfli, Ph.D.
Assistant Professor of University of Notre Dame

miLab™ CER
The Digital Cytology Platform

noul Beyond Diagnostics

miLab™ CER : Automate Staining, Scanning, and Analysis

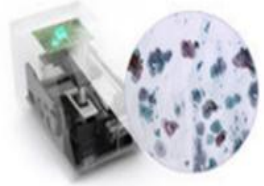
New Gold Standard miLab™

Less Labor, Save Time, Minimum Infra Required, User Friendly

01. Sample Loading

02. Staining

03. Digital Optical Imaging



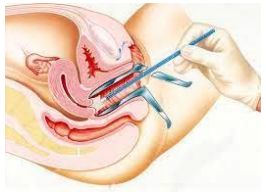
04. Embedded AI Anlaysis

05. Result on Screen

LBC
Liquid-Based Cytology → Slide Preparation → Cell Image Analysis → On-site, Remote Diagnostics

Manual Microscopy Process

High Labor Costs, Time Consuming, Much Infra Required



Manual
Conventional Cytology

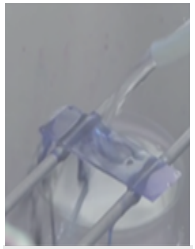
LBC
Liquid-Based Cytology

Reagent Preparation

Methanol Fixation

Drying

Staining



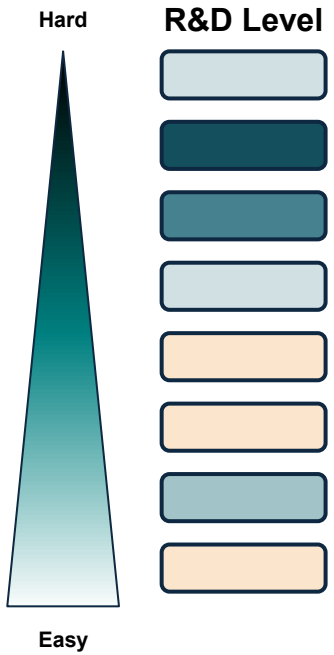
Washing

Drying

Examination

miLab™ CER : The Digital Cytology Platform Profile

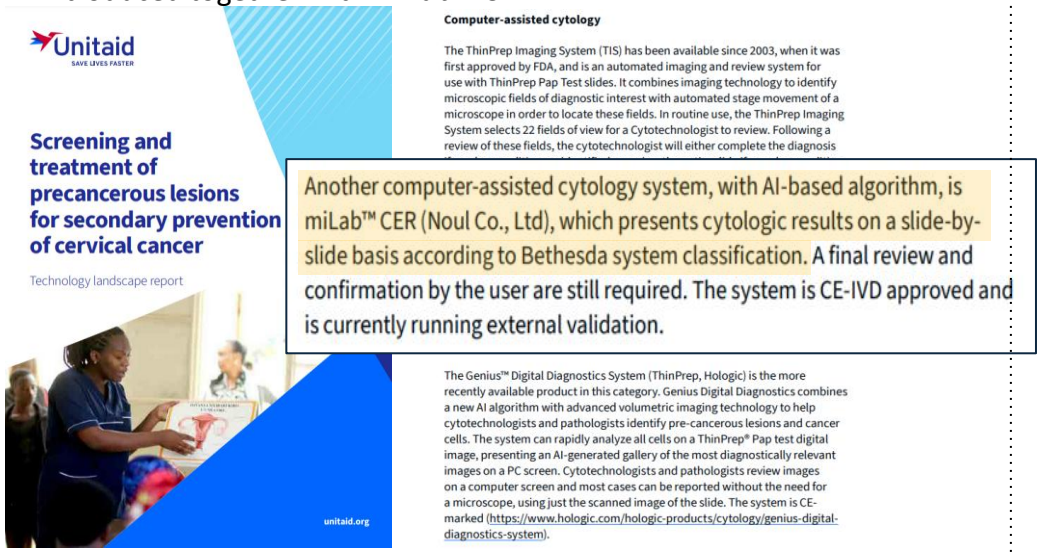
	Test Price	Professional	Time to Result	Accuracy	Infrastructure Investment
Cytology	High	Technician & Specialist	Few days to months	High Variability	Very High
miLab	**Reduced**	**Workload Reduction**	**Point of Care Available**	**AI based High Accuracy**	**Low**



i. **Thyroid** → **CE IVDD**
ii. **Cervical** → **CE IVDD**
iii. **Salivary Gland**
iv. **Urinary Tract**
v. **Breast**
vi. **Pancreato Biliary Tract**
vii. **Respiratory Tract**
viii. **Lymph Node**

miLab™ CER is recognized by UNITAID

- UNITAID* introduced miLab™ as ***a computer-assisted cytology system, with AI-based algorithm***
- Hologic ThinPrep and Genius were the only other two platforms introduced together with miLab™ CER


Unitaid
SAVE LIVES FASTER

Screening and treatment of precancerous lesions for secondary prevention of cervical cancer

Technology landscape report

unitaid.org

Computer-assisted cytology

The ThinPrep Imaging System (TIS) has been available since 2003, when it was first approved by FDA, and is an automated imaging and review system for use with ThinPrep Pap Test slides. It combines imaging technology to identify microscopic fields of diagnostic interest with automated stage movement of a microscope in order to locate these fields. In routine use, the ThinPrep Imaging System selects 22 fields of view for a Cytotechnologist to review. Following a review of these fields, the cytotechnologist will either complete the diagnosis

Another computer-assisted cytology system, with AI-based algorithm, is miLab™ CER (Noul Co., Ltd), which presents cytologic results on a slide-by-slide basis according to Bethesda system classification. A final review and confirmation by the user are still required. The system is CE-IVD approved and is currently running external validation.

The Genius™ Digital Diagnostics System (ThinPrep, Hologic) is the more recently available product in this category. Genius Digital Diagnostics combines a new AI algorithm with advanced volumetric imaging technology to help cytotechnologists and pathologists identify pre-cancerous lesions and cancer cells. The system can rapidly analyze all cells on a ThinPrep® Pap test digital image, presenting an AI-generated gallery of the most diagnostically relevant images on a PC screen. Cytotechnologists and pathologists review images on a computer screen and most cases can be reported without the need for a microscope, using just the scanned image of the slide. The system is CE-marked (https://www.hologic.com/hologic-products/cytology/genius-digital-diagnostics-system).

* WHO/UNITAID Technology Landscape Report (2024)

miLab™ BCM

Innovative CBC – 5part-diff and morphology hematology analyzer

When time, cost and size really matters!!

miLab™ BCM : Workflow

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Beyond Diagnostics

Hospital/Clinic

Physician ordering

Laboratory Medicine

Perform test

CBC*

Flag

1st Screening

- Screening test to evaluate overall health.
- Detect/identify a wide range of hematologic disorders.
- Assist in managing treatment decisions.

Laboratory medicine

Review of test results and send

Morphology

Confirm

2nd Diagnosis aid

- Help diagnosis/confirmation of many illnesses, following 1st CBC screening result.
- If a patient has signs of any known or suspected hematologic disorder, cancer, or leukemia.

Hospital/Clinic

Diagnose and treat

* CBC (Complete blood count)

miLab™ BCM > CBC & RBC morphology

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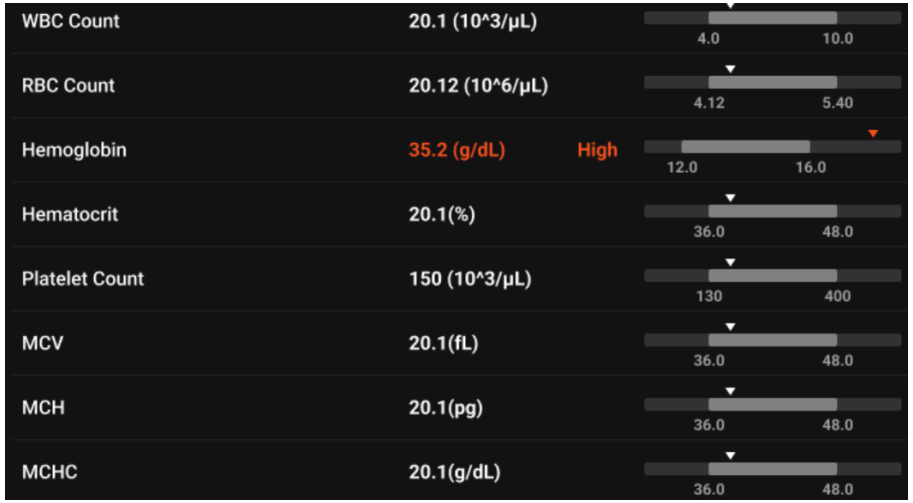
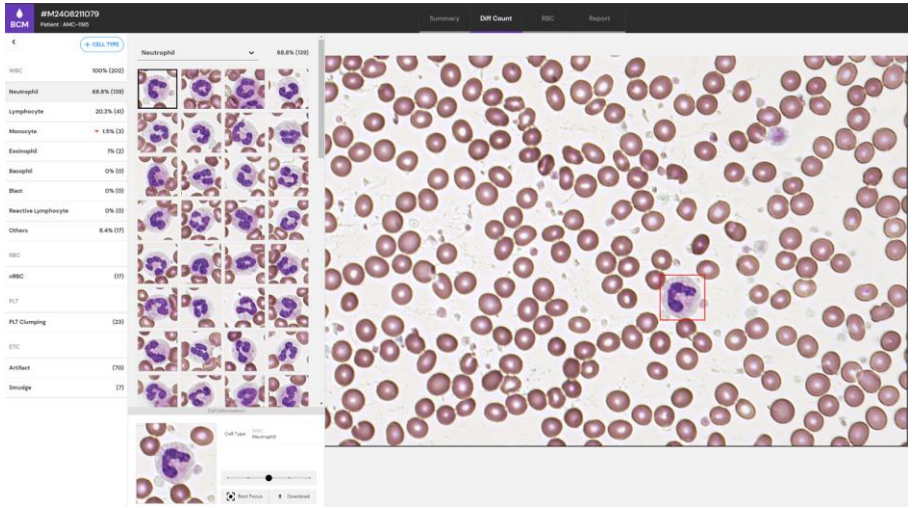
Beyond Diagnostics



Providing main 8 parameters of CBC in POC environment

- Total WBC
- Total RBC
- Hemoglobin
- Hematocrit
- PLT Count
- MCV
- MCH
- MCHC



Providing further Morphological analysis in one flow

- WBC 5-Diff
- IG
- Blast
- Reactive LYMPH
- nRBC
- PLT Clumping
- Smudge Cells

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Beyond Diagnostics

Advantages of miLab™ : Blood Cell Morphology Test

Provide User-Convenience Easily with Small Resources

Small ~ Medium Size Laboratory	Big Size Laboratory
Provide CBC + BCM or BCM only analysis in consistent quality in 20 minutes on-site	Provide efficiency on work-flow after CBC flag
Provide environment where samples are tested fresh for better and faster results	Appropriate for case-to-case analysis such as ICUs and Emergency Units
Streamline the labor-intensive workflow automatically	

miLab™ BCM : Summary

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Beyond Diagnostics

In Summary miLab™ BCM

- Full automation system available for both BCM or CBC+BCM analysis
- Compact size for limited spaces in labs
- Target market : Small to medium labs and hospitals with low loads of CBC tests per day
- Can also be used in big labs especially for ICUs and Emergency Units needing case to case CBC/BCM tests
- miLab Viewer on PC to view the results to save images and reports

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Beyond Diagnostics

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Thank You

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NHS
North West London Pathology

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Keynote Presentation

Joanna Andrew
IBMS President
IBMS

NHS
North West
London Pathology

IBMS Institute of Biomedical Science

Support • Progress • Promote

Pathology beyond Borders

Joanna Andrew

President

Institute of Biomedical Science

IBMS Institute of Biomedical Science

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Global Health

- Aging Population
- Cancer – early detection
- Emerging Infectious diseases
- Workforce shortages

IBMS Institute of Biomedical Science

Support • Progress • Promote

What is required?

- Extend thinking beyond the boundaries of individual health systems
- Central Importance of pathology workforce
- Adapt the way we work culturally and operationally
- Flexible future ready teams
- Best use of innovation to enhance quality, efficiency and resilience

IBMS Strategy

Progress the number and range of members that the IBMS attracts, within the UK and globally

Agree and develop an approach to increase our work and visibility outside of the UK, including increasing the uptake of our qualifications and providing a route to sharing learning and experience across different health systems.

IBMS Institute of Biomedical Science

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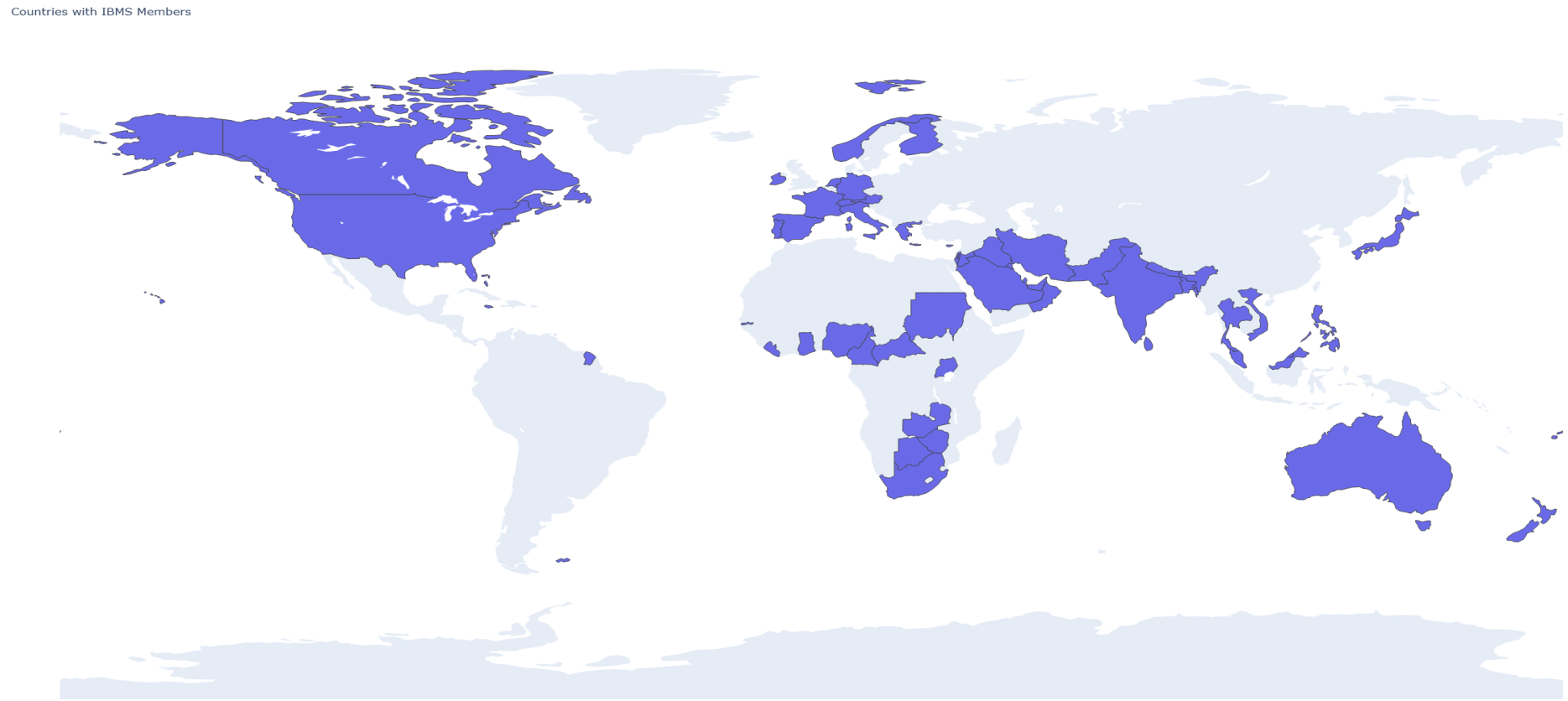
The IBMS has members in over 70 countries across the world



The IBMS accredits the following Non-UK Universities

- Griffith University, Australia
- Kuwait University
- University of Malta
- Munster Technological University, Cork
- Atlantic Technological University, Republic Of Ireland
- Business Management School, Sri Lanka
- Gulf Medical University, United Arab Emirates

6 Universities in Malaysia

- IMU University
- Management & Science University
- Universiti Kuala Lumpur
- Universiti Kebangsaan
- Universiti Putra
- University of Nottingham, Malaysia Campus


UNIVERSITI KEBANGSAAN MALAYSIA

Sultan Qabos University, Oman **(February 2020)**

Issues Across the Globe

- Workforce Challenges

IBMS Institute of Biomedical Science

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Workforce Challenges

Increased demand

Aging population

Increased Cancer Screening

World wide shortage of pathologists

Total number of pathologists is decreasing

- Ageing pathologists
- Not enough training positions
- Training takes too long
- Increased complexity and time to make a diagnosis
- 1 in 3 pathologists jobs are vacant

How can we solve these problems?

We need to think differently

Improvements can be achieved by enhancing the roles of scientists

The biomedical laboratory scientist workforce has a structured system of post-registration training delivered by its professional body (the IBMS)

More appropriate use of this workforce represents a solution to some of the future workforce problems

Nordisk Medicinsk Laboratoriegruppe (NML) Congress

IBMS Institute of Biomedical Science

Support • Progress • Promote

- Held in Reykjavik, 2025
- Advance roles and qualifications for scientists
- To support their recruitment issues

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NHSE Collaboration

- Two day international learning exchange between NHSE and colleagues from Ontario in Canada.
- Facing similar challenges
- Valuable opportunity to share ideas, showcase transformation
- Focus on digital pathology and histopathology automation

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Innovation

- Last year I visited a laboratory in Viborg in the Midt region of Denmark

Cradle to Grave

The phlebotomy within the hospital is available 24/7 managed by the laboratory.

Hand held devices

Alert when a sample needs to be taken
Books in sample at patients side
Sample sent straight to the analyser
Automatically discarded when complete

TAT is 90 minutes from ‘vein to brain’


TEMPUS600
DØRÅBNER


TEMPUS600

Questions

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North West London Pathology

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Panel Discussion

Saghar Missaghian-Cully
Managing Director
North West London Pathology

Joanna Andrew
IBMS President
IBMS

Richard Wardle
Head of Pathology
South Yorkshire and Bassetlaw Pathology

Debra Padgett, MSc, MA, FIBMS, CSci
Clinical Pathology Service Manager / Operational Lead, Institute of Biomedical Science / Northumbria Healthcare NHS Foundation Trust / North East & North Cumbria

Noman Manzoor
Pathology Laboratory Director, General Manager Pathology , Transfusion and Mortuary Services
South 4 Pathology Partnership Great Western Hospitals NHS Foundation Trust

NHS
North West London Pathology

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