



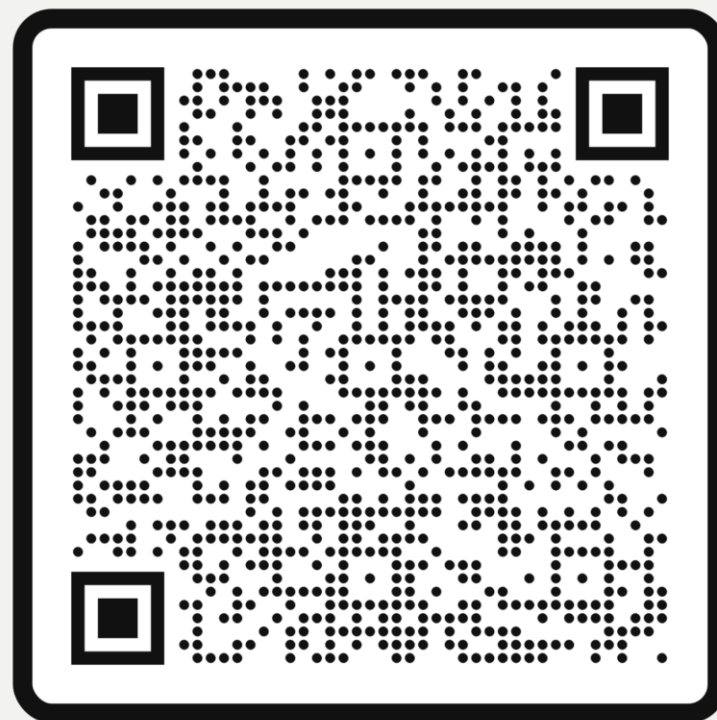
NHS PATHOLOGY CONFERENCE

NHS

North West
London Pathology



Welcome to the 3rd NHS Pathology
Conference!



25th September 2024
15 Hatfields Conference Centre,
London SE1 8DJ



Slido

Please scan the QR Code on the screen. This will take you through to Slido, where you can interact with us.



NHS PATHOLOGY CONFERENCE





NHS PATHOLOGY CONFERENCE



Chair Opening Address



Saghar Missaghian-Cully
Managing Director - North West
London Pathology



NHS PATHOLOGY CONFERENCE



Panel Discussion: Pathology Beyond Borders: Integrating Innovation and Collaboration Across Disciplines



Mr David Wells
CEO - Institute of
Biomedical Science



Professor Sarah Coupland
RCPATH Registrar ; Senior
Consultant Histopathologist ;
George Holt Chair of Pathology
- University of Liverpool



Main Sponsor





Slido

Please scan the QR Code on the screen. This will take you through to Slido, where you can interact with us.



NHS PATHOLOGY CONFERENCE

NHS

North West
London Pathology





Case Study



**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



Sanj Lallie
Digital Integrations
Director
Source LDPATH



Klaudyna Johnstone
Commercial Director
Source LDPATH



The next frontier in histopathology reporting

About Source LDPATH

Trusted, UKAS accredited histopathology and molecular diagnostics services for over 20 years:

- Currently supporting over **85 NHS Trusts** with histopathology services
- Processing over **260,000 samples** per annum
- On track to scan **1 million slides** this year
- Leader in digital pathology integrations
- **280+ Specialist Consultant Pathologists** for reporting

Quicker Cancer Diagnosis

Faster Access to Treatment Pathway

Better Patient Outcomes

sourcebioscience.com



Why Source LDPATH?

What sets us apart:

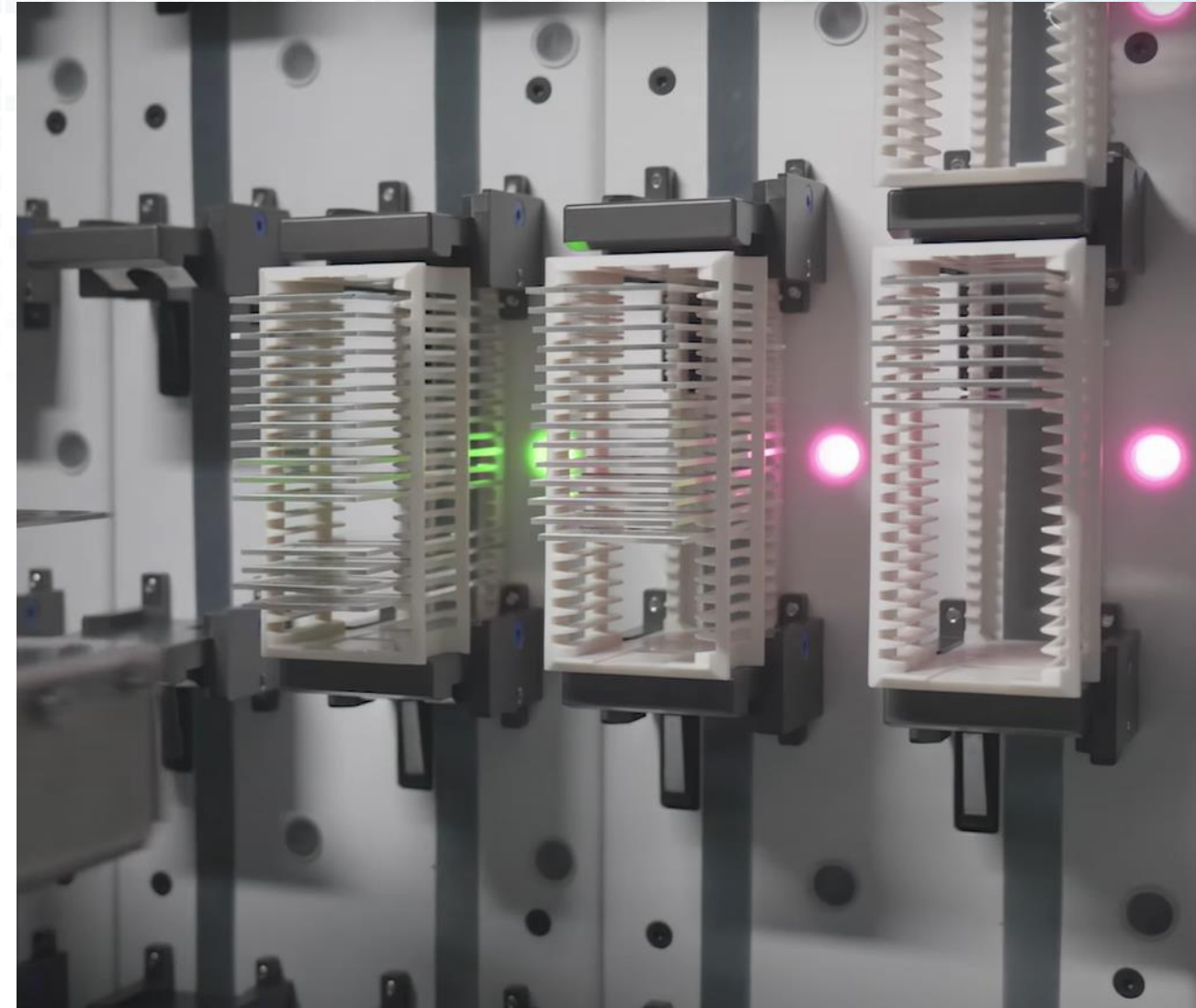
Fast turnaround times due to **case-load balancing** between two large laboratory sites and unique **HIVE LIMS+ with pull system** to enable great **reporting efficiency**

Stringent requirements and onboarding process for our **pathologists**

Leading the way with **digital integrations**

First of its kind **block chain patient log audit trail**

Dedicated team available via phone and email to deal with any requests



An Extension of the Histopathology Laboratory

A full suite of histopathology services, from wet specimen to report, including digital pathology & AI.

- **Extra capacity-extension of your laboratory**
- **Support in hitting Cancer Targets at local, regional and national level - consistent and lower TATs**
- **Scalability for large projects - new laboratories, lab merges**



Robust pathologist onboarding requirements

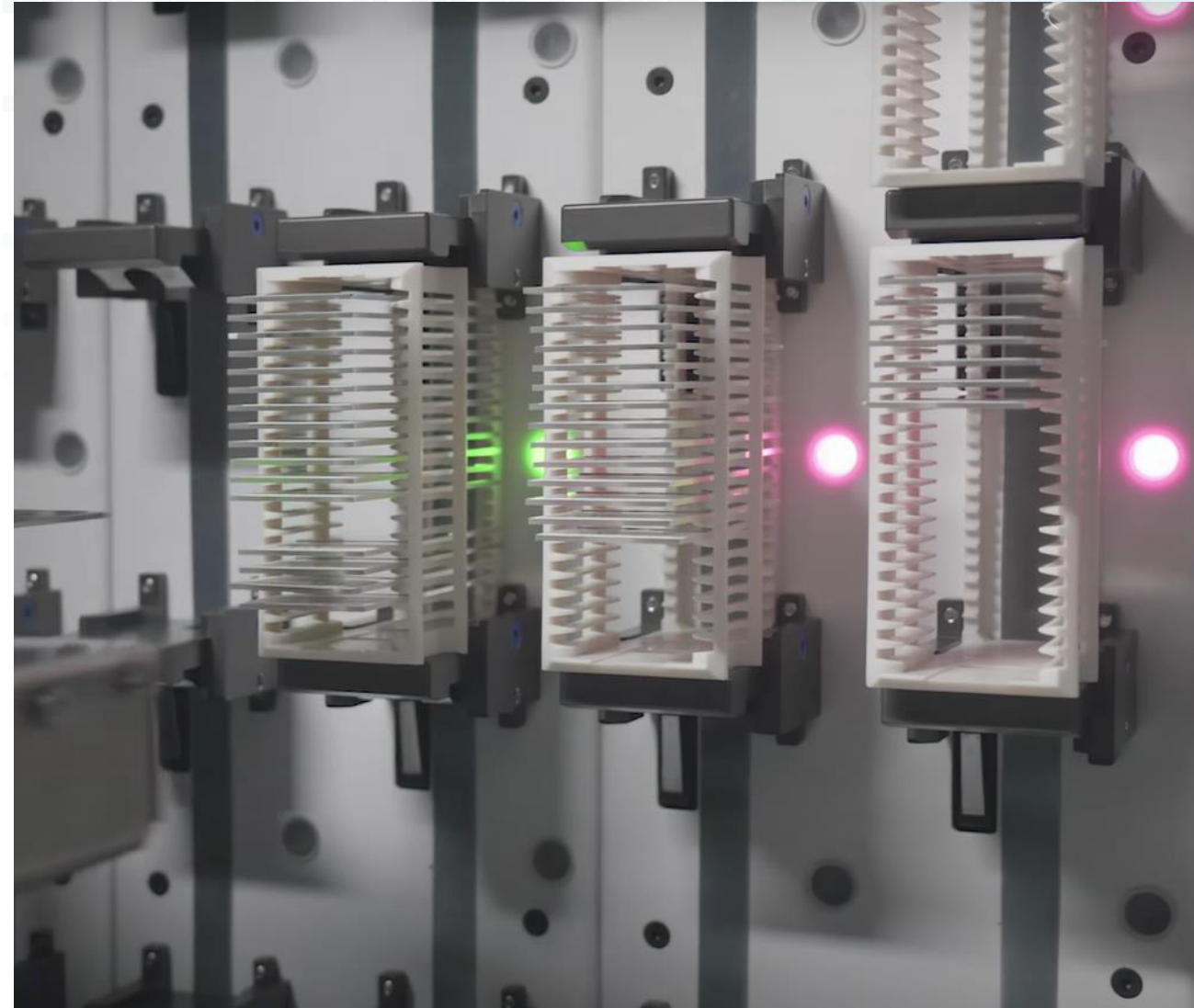
Under our accreditation to ISO15189:2012 Source LDPATH have an obligation to provide assurance to our regulators that the Pathologists who report for us satisfy all the necessary criteria within the standard.

1. General Medical Council (GMC) or General Dental Council (GDC) Registration
2. Medical Defence Union (MDU) membership or equivalent Indemnity Insurer
3. CPD/EQA/Appraisal
 - ISO standard sub clauses:
 - 5.6.3.1 Interlaboratory comparisons – Participation
 - 5.1.4 Personnel introduction to the organizational environment
4. Screening Programs (required for Gynae reporting)
5. Annual Appraisal
6. Environment and confidentiality
 - ISO standard sub clause:
 - 5.2 Accommodation and environmental conditions
 - 4.1.1.3e Confidentiality of information is maintained.

HIVE LIMS+

Turbo charge your existing LIMS

- Built specifically for Histopathology and Cytopathology which has led to unrivalled diagnostic quality and turnaround times.
- Audit trail built in Blockchain for increased security which allows us to see any time a case has been viewed or modified.
- 2 factor authentication
- Already integrated with 2 national LIMS providers and a practice management software.
- Allows the development of automated reporting teams, second opinions, MDM discussions, sharing of digital images, standardised dataset reports and extremely advanced management statistics.
- HIVE LIMS+ allows integration with AI providers.



So what could this mean for your histopathology department?



Notifications

0

Last 24 hours

Ready for Report Cases

4

As of 21:03

Pending Further Work Cases

Pending ALW/SO: 0

Open Issues: 0

As of 21:03

Reported cases

4

Last 48 hours

SO Received

0

As of 21:03

Double Reporting Partner Request

0

As of 21:03

Double Reporting Request

Waiting for response: 2

To be responded: 0

Pull Cases i

5 cases ^

Case Ref. Lab Ref.	Patient	Clinic Clinician	Pathologist	Specimen Type	Procedure Lab Entry	Release Date	ALW	SO	Status	Action
22L00000245	*****	Rokas Cli&LabR Rokas Clinician	Pull	Skin NOS - up to 7 specimens	09/10/2022 10/10/2022					
22L00000246	*****	Rokas test Clinic Rokas Tatarunas	Pull	Mohs - Standard	09/10/2022 10/10/2022					
22L00000250	*****	FerencTestClinic Ferenc Clinician1	Pull	Alopecia Biopsy	10/10/2022 11/10/2022					
22L00000251	*****	Rokas test Clinic Rokas Tatarunas	Pull	Skin NOS - up to 7 specimens	11/10/2022 12/10/2022					
22L00000259 H221122	*****	SanjClinicNHS sanj clinician	Pull	Skin NOS - up to 7 specimens	16/10/2022 18/10/2022					

Showing 1 to 5 of 5 entries

« < 1 > » 1 of 1 items

Ready for report i

6 cases v

Pending further work i

0 cases v

Double Reporting i

2 cases ^

Case Ref. Lab Ref.	Patient	Clinic Clinician	Pathologist	Specimen Type	Procedure	Lab Entry	Release Date	Double Reporting Response	Status	Action
22L00000234		SanjClinicNHS		Skin NOS - up to 7						

Snomed T

01000 Skin

Snomed P

1109 Excision / Re-excision

Snomed M

80703 Carcinoma, Squamous Cell

Microscopy

Breslow Thickness *

3mm

Invasive *

Yes

Peripheral Excision Margin *

2mm

Clark Level *

Select a value
I
II
III
IV

Deep Excision Margin *

Select a value

Stage (AJCC) *

Select a value

Subtype *

Select a value

Regression *

Select a value

Introducing: A Working Group for Digital Pathology

Mission: To shape key recommendations for advancing the transition to digital pathology, that sits alongside and further supports the implementation of the NHSE 6-point histopathology plan.

Subsequently, to outline the imperative for ringfenced funding to support the NHS successfully integrate digital pathology in the UK.

Uniquely bringing together expertise from **key operational and clinical NHS stakeholders**, alongside representatives from **IBMS, RCPATH**, and a **partial industry representation**, gathering the integral perspective of relevant thought leaders operating in the field.

Debra Padgett: Chair of The Digital Pathology Working Group



Contributors

Member	Organisation
Debra Padgett (Chair)	IBMS Past President, NENC Pathology Operational Lead
Dr Hatim Abdulhussein	Chief Executive Officer, Health Innovation Kent, Surrey, Sussex
Dr Branko Perunovic	Chief Medical Officer, Black Country Pathology Service
Bruce Daniel	Head of Pathology NHS England – South West
Dr Alistair Robson	Joint Founder and Clinical Director Source LDPath, Consultant Dermatopathologist
Dr Muhammed Aslam	Clinical Director North Wales Diagnostic and Specialist Clinical Services, Consultant Pathologist
Dr Tim Bracey	Service Line Clinical Director Penninsula Pathology Network, Consultant Pathologist
Dr David Hughes	Pathology Clinical Lead, NHS England, North East and Yorkshire, Consultant Histopathologist
Dr Laszlo Igali	VP RCPATH, Consultant Histopathologist

The platform is facilitated, but not led by, Source LDPath, who have served as a general facilitation and oversight role for meetings and the reporting of outcomes.

Whitepaper Publication

The Group will be publishing a whitepaper by the end of 2024, which considers key recommendations for digital pathology implementation to support NHSE upwards trajectory of digital transformation. This publication will aim to deliver impactful insights to support nation decision-making authorities and secure dedicated funding for NHS histopathology to accelerate digital pathology deployment.

Key focal areas:

- Cultural change within the pathology umbrella
- Regulatory standards for national deployment of digital pathology
- Funding and support for successful national implementation
- Lessons learnt from past transformation programmes
- Addressing patient need through engagement
- What is possible through service re-design



Contact the Team

sourcebioscience.com
enquiries@sourcebioscience.com



**SCAN TO
VISIT
WEBSITE**



NHS PATHOLOGY CONFERENCE

NHS

North West
London Pathology



Refreshments & Networking



NHS PATHOLOGY CONFERENCE



Chair Opening Address



Saghar Missaghian-Cully
Managing Director - North West
London Pathology



NHS PATHOLOGY CONFERENCE

NHS

North West
London Pathology



Case Study





Slido

Please scan the QR Code on the screen. This will take you through to Slido, where you can interact with us.





NHS PATHOLOGY CONFERENCE



Case Study



Simon Staveley

Exponential-e - Head of Healthcare
Platform Solutions



NHS PATHOLOGY CONFERENCE

NHS

North West
London Pathology



Case Study



aiforia[®]

AI for image analysis



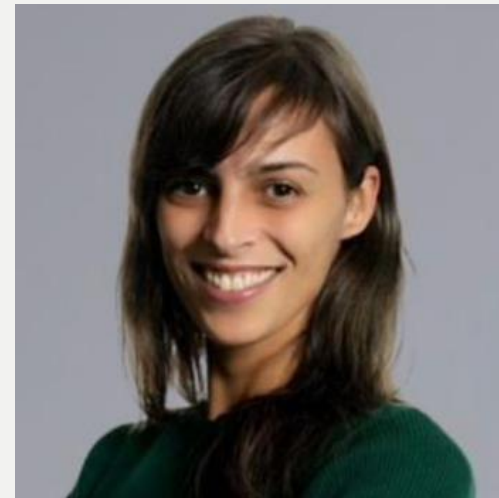
Slido

Please scan the QR Code on the screen. This will take you through to Slido, where you can interact with us.





Case Study



Rute Pedrosa, Ph.D.
Field Application
Scientist - Aiforia



Sharmila Mistry, MSc
Key Account Manager
Aiforia



NHS PATHOLOGY CONFERENCE



Fireside Chat



Bob Murray

Associate Director of Procurement -
Maidstone & Tunbridge Wells NHS Trust



NHS PATHOLOGY CONFERENCE

NHS

North West
London Pathology



Case Study





Slido

Please scan the QR Code on the screen. This will take you through to Slido, where you can interact with us.





NHS PATHOLOGY CONFERENCE

NHS

North West
London Pathology



Case Study



Luke Dyer
Managing Director
Health Now



Pathology Insourcing Services

Presented by:

Luke Dyer (Managing Director)



Insourcing Solutions

We provide exceptional delivery to our end clients operating in the follow areas:



Pathology



Urology



Dermatology



Rheumatology



Ophthalmology



Gynaecology



General surgery



ENT



Gastroenterology



Cardiology



Cardiothoracic surgery



Radiology

Benefits



Utilisation – Our teams work on site within departments that are fully equipped and can work core hours + any combination ‘out of hours’. We’ll work in your departments ‘down times’ to maximise capacity.



Reduced Processes – Upon contractual setup, we take as much or as little control as our client's desire. We mirror processes agreed with the department to ensure less room for error and keep control of the sample journey with less off-site/different processes.



Cost Saving and Streamlining – Compared to outsourcing services, which involve booking and couriering samples, increasing the risk of errors and incurring additional costs, our in-house Health Now team significantly reduces both error and expenditure.



Accountability – We ensure accountability for all completed work while also ensuring that our clients maintain oversight. Internal controls include policies and procedures mirroring, MMP insurances, real-time guarantees, reporting on samples/cases information, TATs, KPIs, and other necessary statistics.

Benefits



Mid-Long Term - Health Now are a mid to long term solution rather than emergency locum provision. Following Brexit, we have seen the market availability decrease significantly preventing quality overseas candidates to work here in the UK.



Insurance Coverage - this includes medical malpractice insurance to protect against claims arising from Health Now errors or omissions.



Locum Cover Comparison - Departments struggle to get locum cover. This leads to many departments paying significantly higher rates to attract qualified candidates.



VAT Exempt Service - Providers can avoid paying VAT on insourcing services, resulting in significant cost savings and increased profitability. This benefit can be especially advantageous for NHS entities as they are unable to claim VAT.

Benefits



Staff Training – Staff are trained by Health Now Quality and Training Officers.



HR/Principal Biomedical Scientist Monitoring - monitoring and responding to staffing/quality issues within our deployed team (no additional management from our clients).



Track Record - Partner with a provider with a strong proven track record.



No Down Time - Continuity of service, no down time, no sickness, no A/L gaps.



Oversight - Clinical Oversight from Health Now's Chief Medical Officer.



CQC - Health Now upholds CQC level governance throughout the business.

Histology Insourcing – Workflow



Quality Assurance

Our clinical and quality governance framework ensures that we always maintain patient centric, high-quality care through rigorous service scrutiny, oversight, and performance management.

The framework is overseen by our Chief Medical Officer and incorporates seven key pillars:

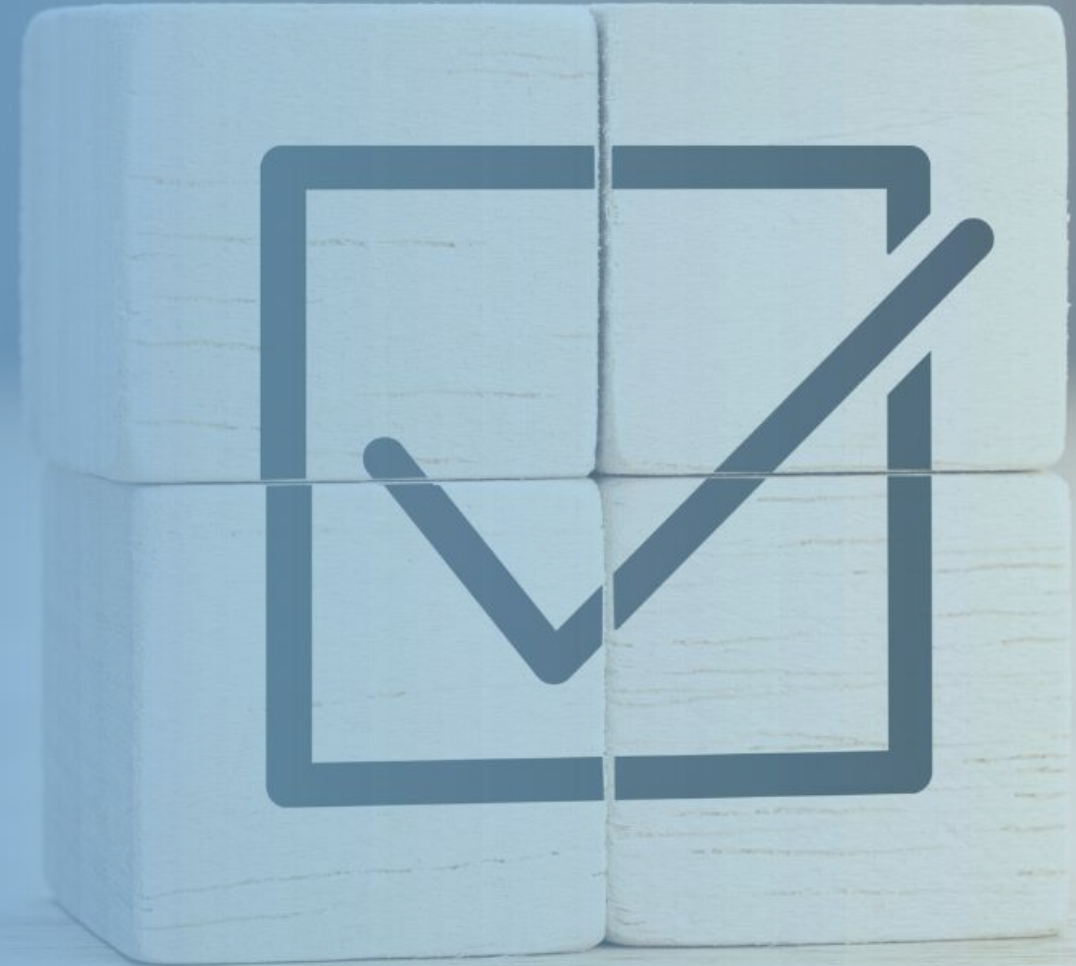
- ✔ Staff Management
- ✔ Clinical Effectiveness
- ✔ Information
- ✔ Risk Management
- ✔ Education & Training
- ✔ Audit
- ✔ Patient/Public involvement is designed to ensure that we always maintain patient-centric, high-quality care. This is achieved through rigorous service scrutiny, oversight, and performance management

Workforce Compliance

- ✓ Proof of eligibility verified (Right to Work) in line with NHS Employers Check Standards and Home Office guidelines.
 - 1 Manual right to work check
 - 2 Right to work check using IDVT via the services of an IDSP
 - 3 Home Office online right to work check
- ✓ Proof of Identity Verified in line with NHS Employers Check Standards – Photo ID and 2 Proof of address dated within the last 3 months
- ✓ Photographic Identity documents must undergo Quality Checks via an ID Verification Scanner/scanning equipment/outsourced third party software.

Workforce Compliance

- ✔ Enhanced DBS check
- ✔ Overseas Police check
- ✔ Professional and Regulatory Body Registration
- ✔ HCPC alerts, notices or investigations
- ✔ Professional qualifications verified
- ✔ HPAN checks completed annually
- ✔ Our SEQOSH accredited provider conducts occupational health checks



Workforce Compliance

Mandatory training in line with CSTF. Modules include:

- ✓ Life support training (level dependant of job role)
- ✓ Conflict resolution/ Handling violence and aggression
- ✓ Information governance/The Caldecott principles
- ✓ Health, Safety and Welfare
- ✓ Infection Prevention (Included MRSA & Clostridium Difficile)
- ✓ Equality, Diversity and Human rights
- ✓ Counter Fraud Training
- ✓ Complaints Handling
- ✓ Manual Handling (Practical)
- ✓ Fire Safety
- ✓ Safeguarding Adults
- ✓ Safeguarding Children
- ✓ Preventing Radicalisation
- ✓ Lone Worker Training
- ✓ Mental Health Act & Mental Capacity Act

Working with Health Now



KPI Example Report

	Provision of reports to the Customer	Discrepancy rates in report accuracy to be no more than 5% (internal QA/audit results and mechanism to be shared quarterly)	Replacement BMS for time of unexpected sickness and leave. No more than 1 period of absence per quarter to be cancelled for non-clinical reasons	No more than 2% complaints concerning the BMS staff over a quarterly period	Company initial response to any complaints or staff issues to be within 24hrs
Example	100%	0%	0	0.00%	0
Oct-23					
Nov-23					
Dec-23					
Jan-24					
Feb-24					
Mar-24					

No BMS to be currently undergoing professional/investigation - 100% compliance	Number of Services / Cases Provided	+ / - Service Delivery Numbers	Peer Review Records	Clinical Complaints	Non-Clinical Complaints	Works Completed	Serious Incidents
100%	0	0	0	0	0	0	0

Policies and Procedures - EXAMPLE

- ▶▶ Candidate Recruitment and Compliance Policy
- ▶▶ Complaints Policy
- ▶▶ Conduct & Disciplinary Policy
- ▶▶ Confidentiality Policy
- ▶▶ Consent to Care and Support Policy
- ▶▶ Contracts Tracker
- ▶▶ Data Protection Policy
- ▶▶ Data Retention Policy
- ▶▶ Equality & Diversity Policy
- ▶▶ Freedom to Speak Up (Whistleblowing) Policy
- ▶▶ Governance Policy
- ▶▶ Harassment & Bullying Policy
- ▶▶ Health & Safety Policy
- ▶▶ Health Now SDC Template Invoicing Process
- ▶▶ Incident Reporting and Management Policy
- ▶▶ Infection Control & Precautions Policy
- ▶▶ Managing Underperformance or Concerns Raised and Supporting Candidates Policy
- ▶▶ Mandatory Training Policy
- ▶▶ Mobilisation Plan
- ▶▶ Recruitment, Selection & Retention Policy
- ▶▶ Risk Management Policy
- ▶▶ Safeguarding Adults Policy
- ▶▶ Safeguarding Children & Young Persons Policy

Bolton NHS Foundation Trust



Bolton

NHS Foundation Trust

“We contracted Health Now for our department to tackle backlogs which were a result of the Pandemic. When scoping this service, there was a degree of uncertainty as our Trust had never contracted this kind of service before, and as the NHS framework was new, this just added to the uncertainty of how this was going to work. Let’s say everyone was nervous!

Liaising with Health Now and having strong engagement from the department really helped. Everyone worked together to understand our requirements and they were very knowledgeable, and we supported each other through the process. There were some issues to begin with, but we all worked together to ensure the backlogs were completed and this can be attributed to Health Now’s “can-do” response.

I was thrilled with the service and the accomplishment for our department and Health Now in their understanding of our requirements and how quickly to get to the desired result, so much so that we extended the contract. The contract runs like clockwork, and I feel secure in the knowledge we are in capable hands.”

Paula Lewin

**Divisional Procurement Partner
Bolton NHS Foundation Trust**



University Hospitals of Leicester NHS Trust



**University Hospitals
of Leicester**
NHS Trust

"I have no hesitation in recommending the team at Health Now. In our department at University Hospitals of Leicester were in a difficult position post Covid19 with a backlog of ~3,000 patients. Ben Hart (Associate Director) was excellent in sourcing high quality staff for us.

The staff integrated well into the department and provided excellent scanning and reporting services which were audited by our Senior Chief. The team at Health Now were excellent in providing staff information before they worked in the department, so we were able to organise access to IM&T software systems and reporting systems.

The services that were provided were excellent and have allowed us to reduce our overall waiting list from ~3,000 patients down to <250 patients. We are currently still working with Health Now to support in meeting our service gap and shortfall and to support in managing demand and capacity on the service.

I can not thank the team at Health Now enough for the support they provided to allow us to reduce our waiting list size at UHL."

Liam
Service Manager
University Hospitals of Leicester NHS Trust





Thank You



Health Now Limited, Level 4, St Magnus House, 3 Lower Thames St, London EC3R 6HD
www.healthnow.co.uk | 0203 343 5971 | info@healthnow.co.uk

This document is protected by UK and International copyright laws. Reproduction and distribution of this document without written permission is prohibited.
© 2024 Health Now Ltd.



NHS PATHOLOGY CONFERENCE

NHS

North West
London Pathology



Lunch & Networking



NHS PATHOLOGY CONFERENCE



Chair Opening Address



Saghar Missaghian-Cully
Managing Director - North West
London Pathology



NHS PATHOLOGY CONFERENCE

NHS

North West
London Pathology



Case Study





Slido

Please scan the QR Code on the screen. This will take you through to Slido, where you can interact with us.





NHS PATHOLOGY CONFERENCE

NHS

North West
London Pathology



Case Study



Dr. Uttara Joshi

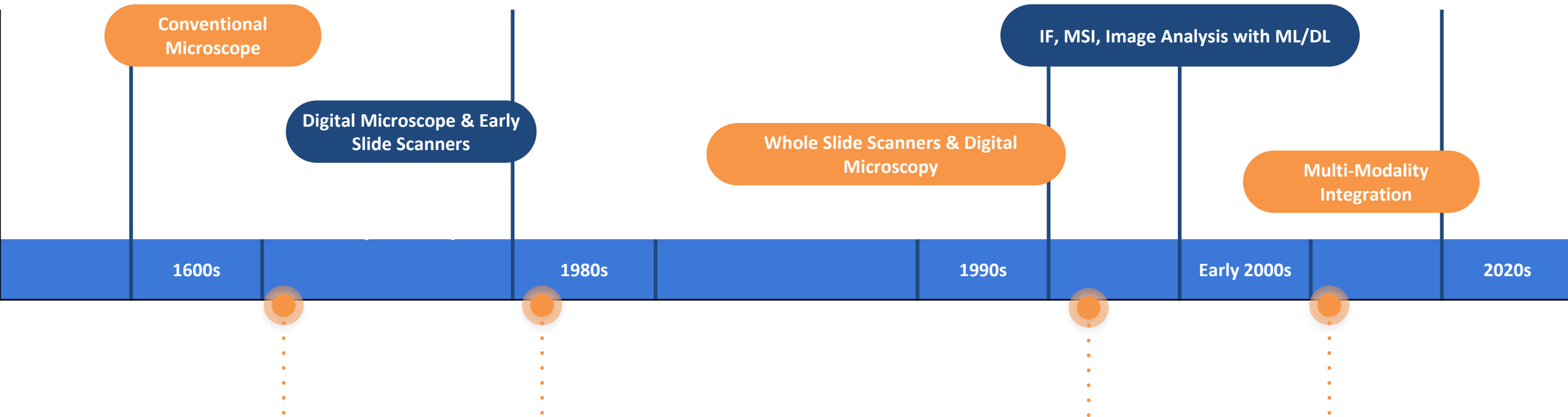
Head-Strategic Initiatives
AIRA Matrix Private Limited

AI-based Quality & Cost Control for Digital Pathology



CONFIDENTIAL INFORMATION. ALL RIGHTS RESERVED

The Evolution of Digital and Computational Pathology



- Scanner technology improvement
- Network-attached storage to cloud storage
- Growing speeds of network from WIFI-6 to 5G
- High-performance CPU and GPU

Applications of AI in Digital Pathology



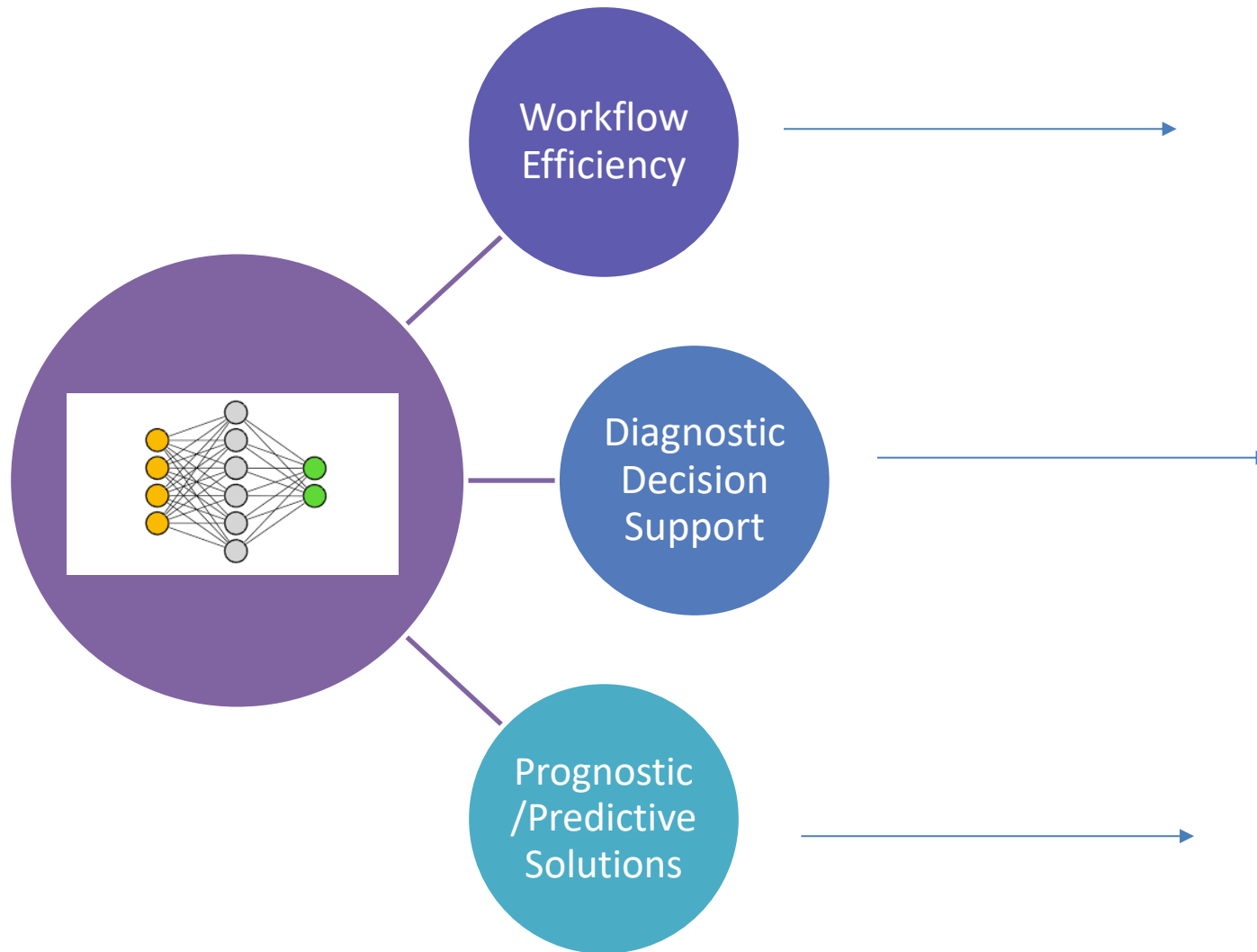
AI applications that improve the efficiency of laboratory workflows & help diagnostic decision support can prove to be game-changers

- 🌀 Workflow Efficiency – Improved turnaround of high-throughput workflows
- 🌀 Diagnostic Decision support – Automated quantification to remove selection bias & omission errors
- 🌀 Prognostic/Predictive Solutions – Predict disease trajectory/response to therapy to help personalized therapy decisions

Example Applications:

- 🌀 **Improving throughput of preanalytical workflows for downstream accuracy – (Quality Control)**
- 🌀 Optimizing repetitive/labor-intensive analytical processes (LN metastasis, Perineural Invasion)
- 🌀 Biomarker quantification for accurate, reproducible reporting (PDL-1)
- 🌀 Detection & quantification of parameters for better prognostication (Gleason Grading + Cribriform + NEPC)
- 🌀 **Predictive solutions – Predict metastases, biochemical recurrence, molecular subtype, and response to therapy.**

Applications of AI in Digital Pathology



- **Shorter validation cycles**
- **Relatively easier adoption**
- **Stronger case for RoI due to demonstrable savings on resources**

- Longer validation
- Disruptive adoption
- Difficult to prove RoI

- Prospective validation
- Standard of care acceptance
- Stronger case for RoI with a direct impact on costs, turnaround, and patient outcomes

Preanalytical variables account for 30% to 75% of laboratory errors




- Impact the **turnaround time** and usability of WSI
- Directly affecting **patient management** (especially in cancer care)
- Cost represents between **0.23 % to 1.2 %** of the total hospital operating cost. (~\$1.2 million/year in a 650-bed US hospital)

Digitization adds another variable in the already error-prone preanalytical workflow

- Manual QC is at best a sampling method with room for misses
- Time-consuming and cumbersome - **not conducive to applying AI at scale**
- **Effect on downstream image analysis – Garbage In Garbage Out**



QC Automation helps improve the Preanalytical Workflow Efficiency & Downstream Analysis Accuracy

Improved Throughput - Digital Pathology at Scale

-  Needs end-to-end workflow to be automated
-  Manual pre-analytical QC checks do not fit in
-  Reduction in TAT by earlier corrective action



Improved Accuracy - Ensuring Optimum Performance of AI

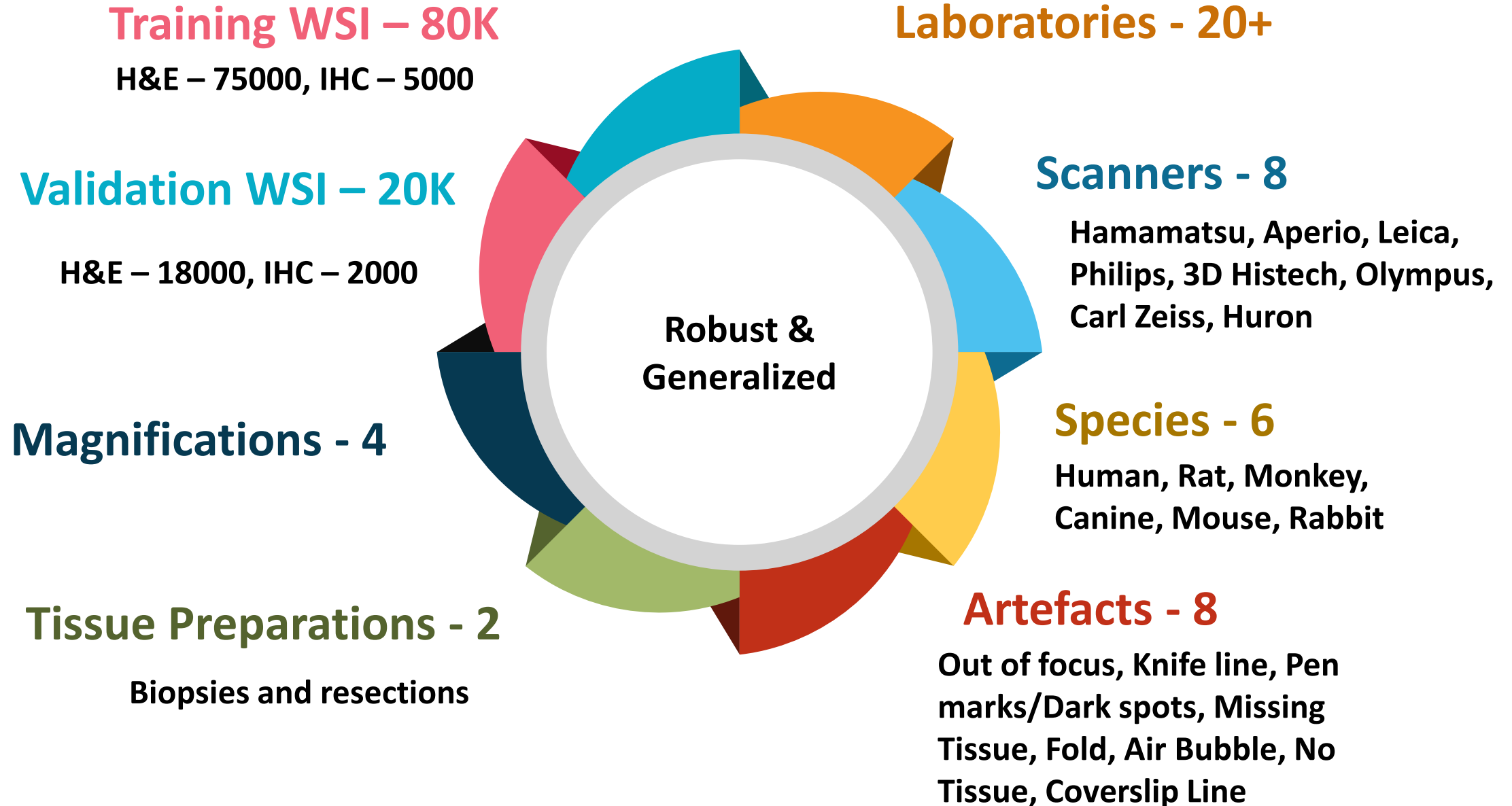
-  Artefacts can cause sub-optimal AI results
-  Introducing automated QC helps improve the performance of AI solutions

Automated Detection & Quantification of Artefacts

- 🌀 Web-based platform for automation of the preanalytical QC phase in the anatomic pathology laboratory
 - 🌀 AI-based solution modules to assess staining gap, tissue processing artefacts, and digitization errors in whole slide images
 - 🌀 Quantification of artefacts with downstream workflows to **accept** or **reject** WSI based on custom thresholds
 - 🌀 Error analysis to assign WSI for restaining, reprocessing, or rescanning
 - 🌀 Data analytics for quality audits
 - 🌀 **AI at scale with accurate image analysis**

- ✓ **Complete automation & Improved turnaround of digital pathology workflows**
- ✓ **Savings on costs & resources**
- ✓ **Better accuracy of results**

Generalized Across Preanalytical Workflow Variables

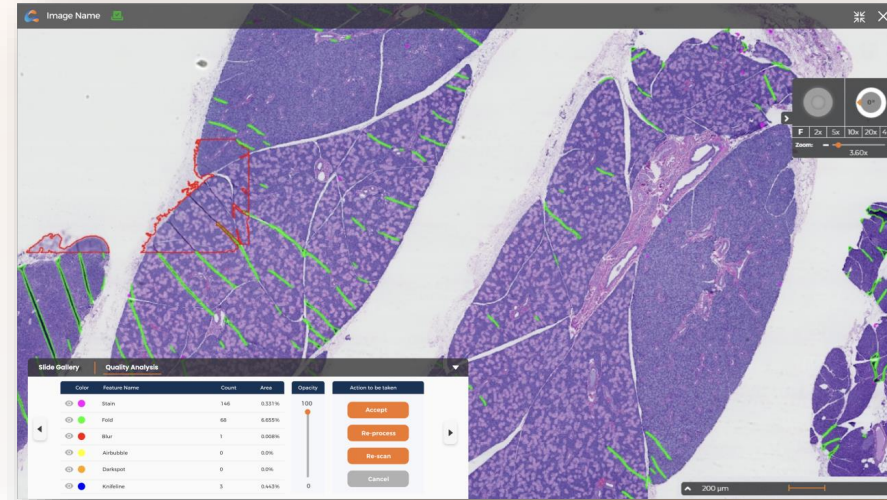


Ensuring Speed of Preanalytical Workflows with Downstream Accuracy

Sensitivity
95%

Specificity
96%

Throughput
~3-8
WSI/Minute



Scanner Agnostic



Species Agnostic



Integrated with IMS

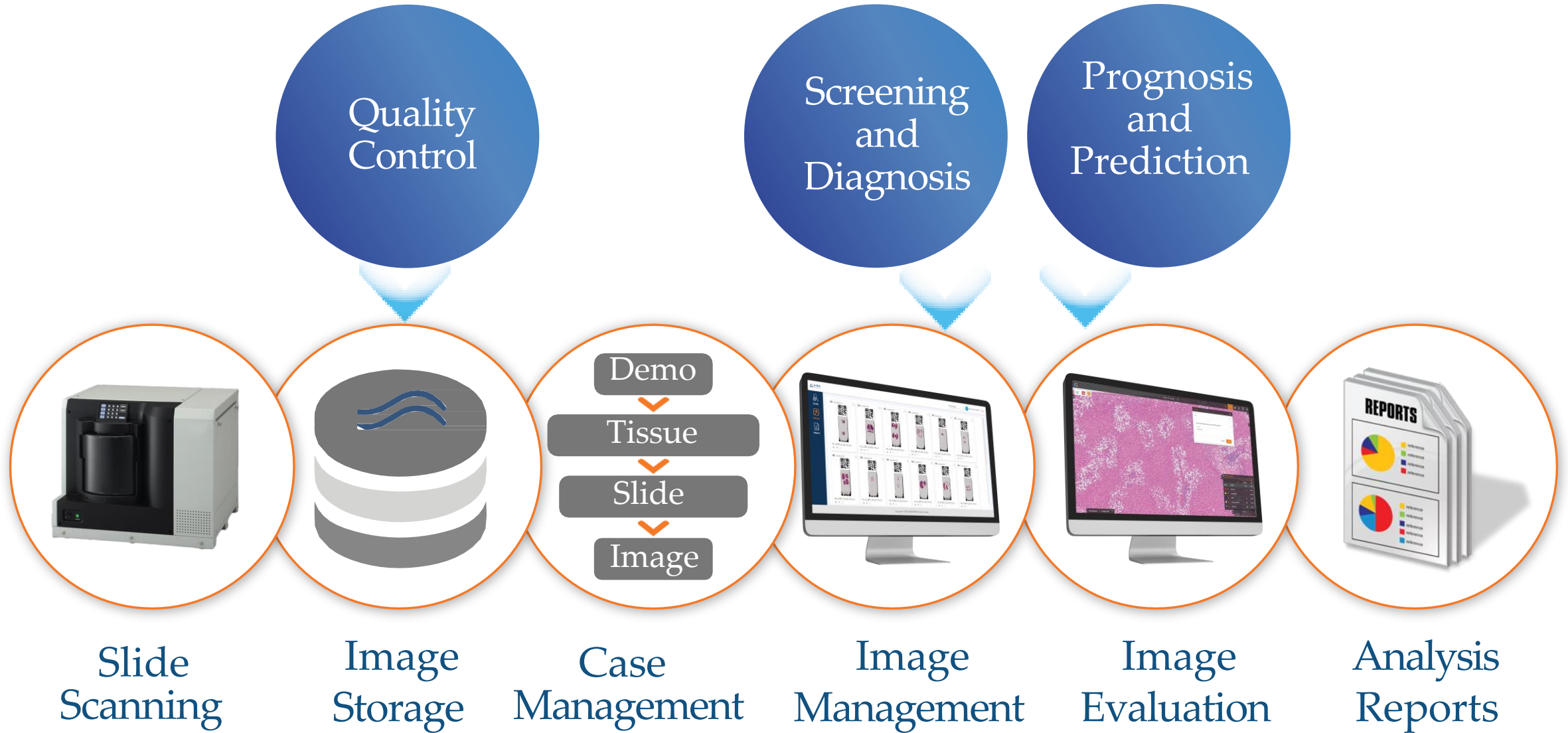
Tissue Processing Artefacts

- Tissue Folds
- Pen Marks
- Air Bubbles
- Coverslip Line
- Knife line

Scanning Artefacts

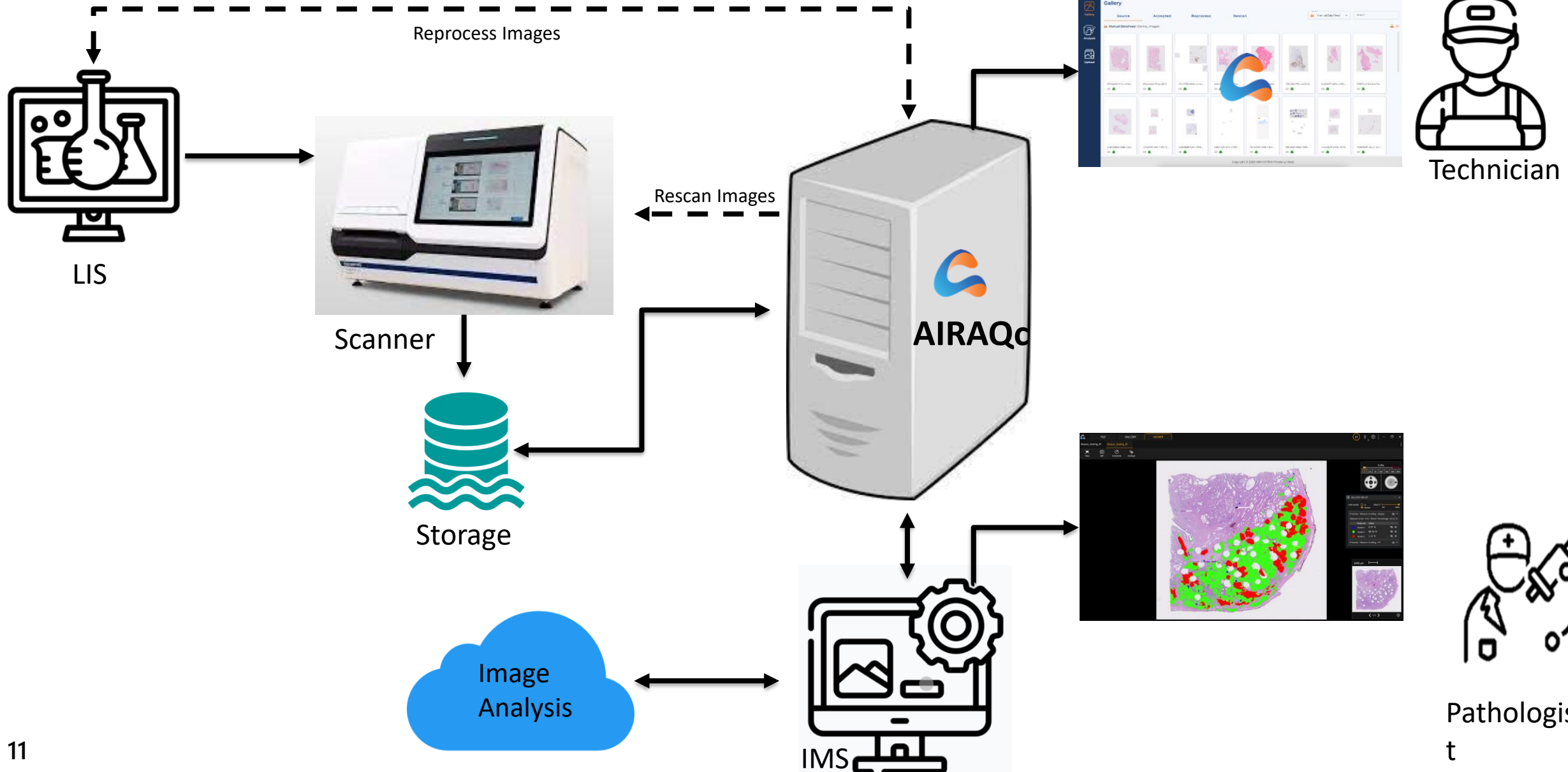
- Out of focus
- Missing Tissue
- No tissue

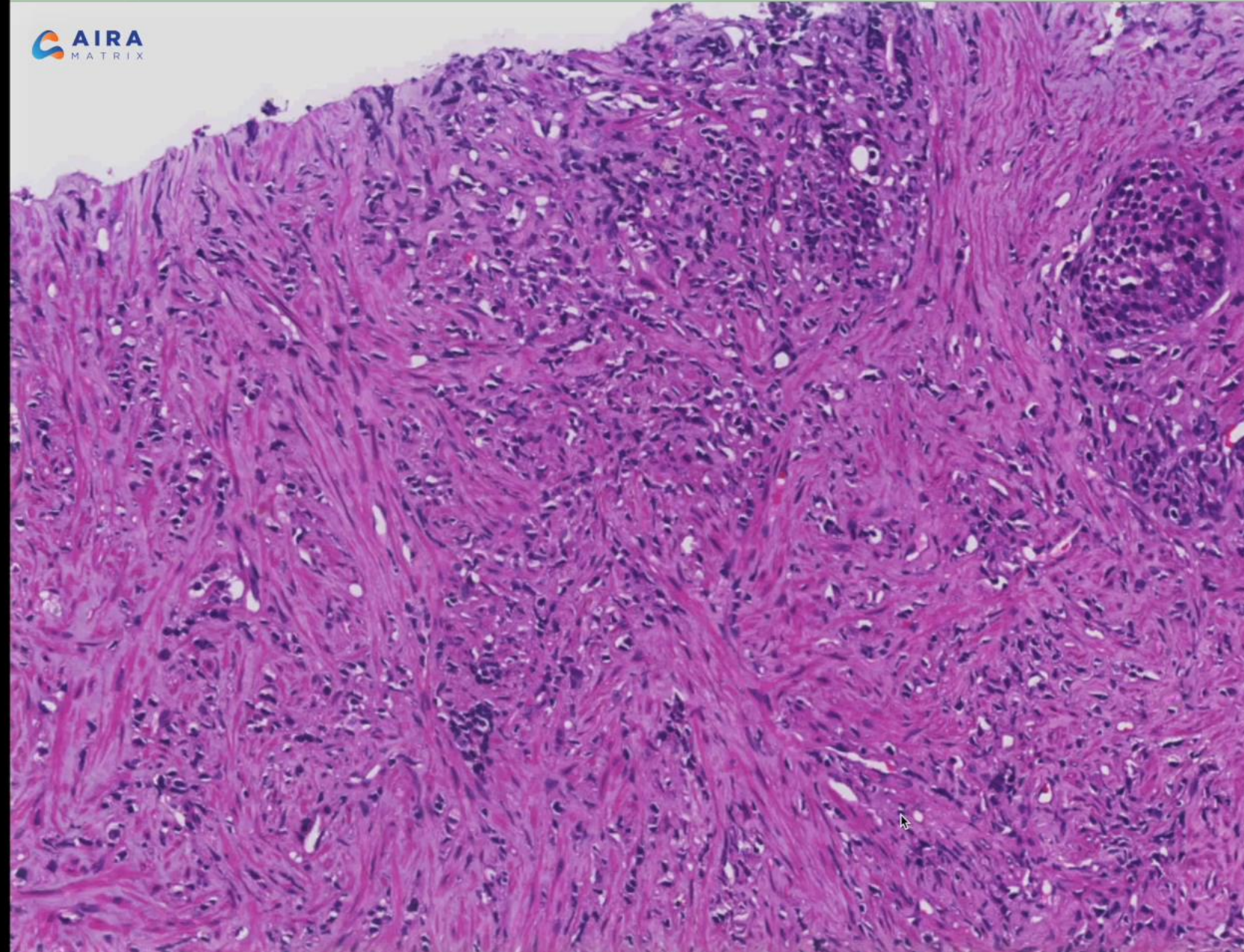
Fit in the Preanalytical Workflow



Fit in the Preanalytical Workflow

Bi-directional Integration with LIS and IMS





AIRAQc

edward.miller@airamatrix.com

.....

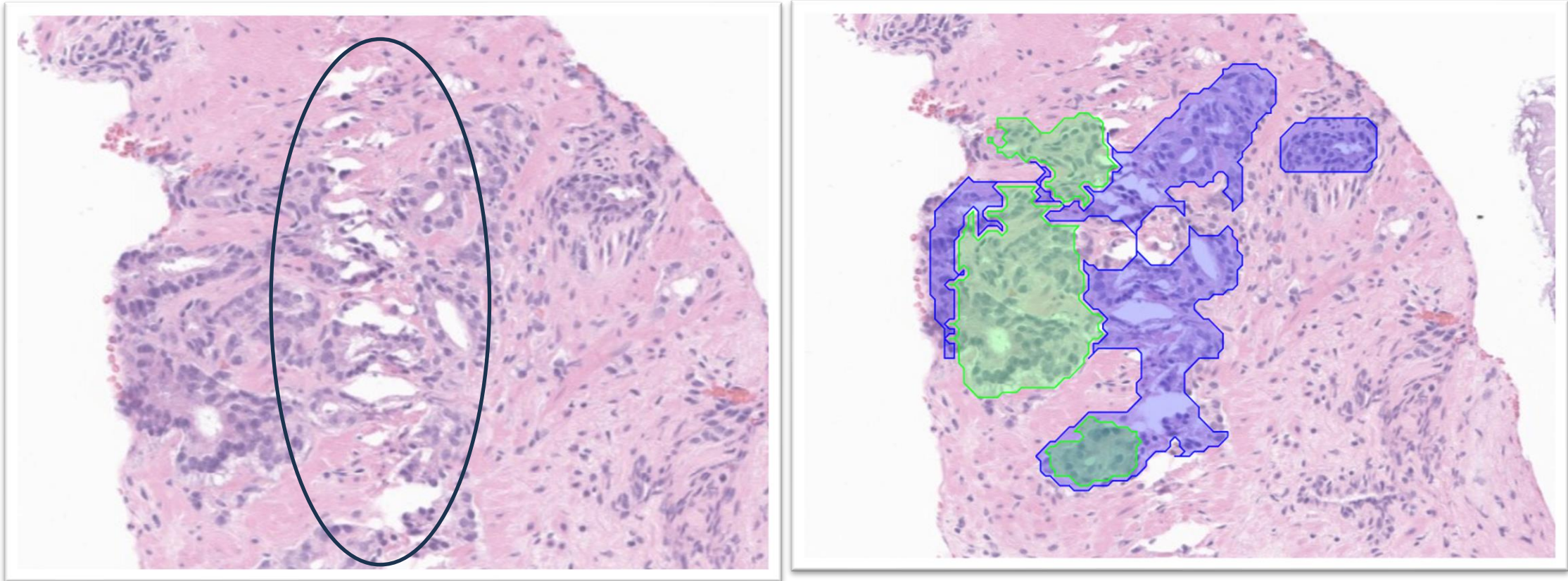
Login





IMPACT OF AIRAQc ON
DOWNSTREAM AI
IMAGE ANALYSIS

Highlighting Knife Line Artefact

Impact of AIRAQc on Gleason Grading – Grade 3 vs 4

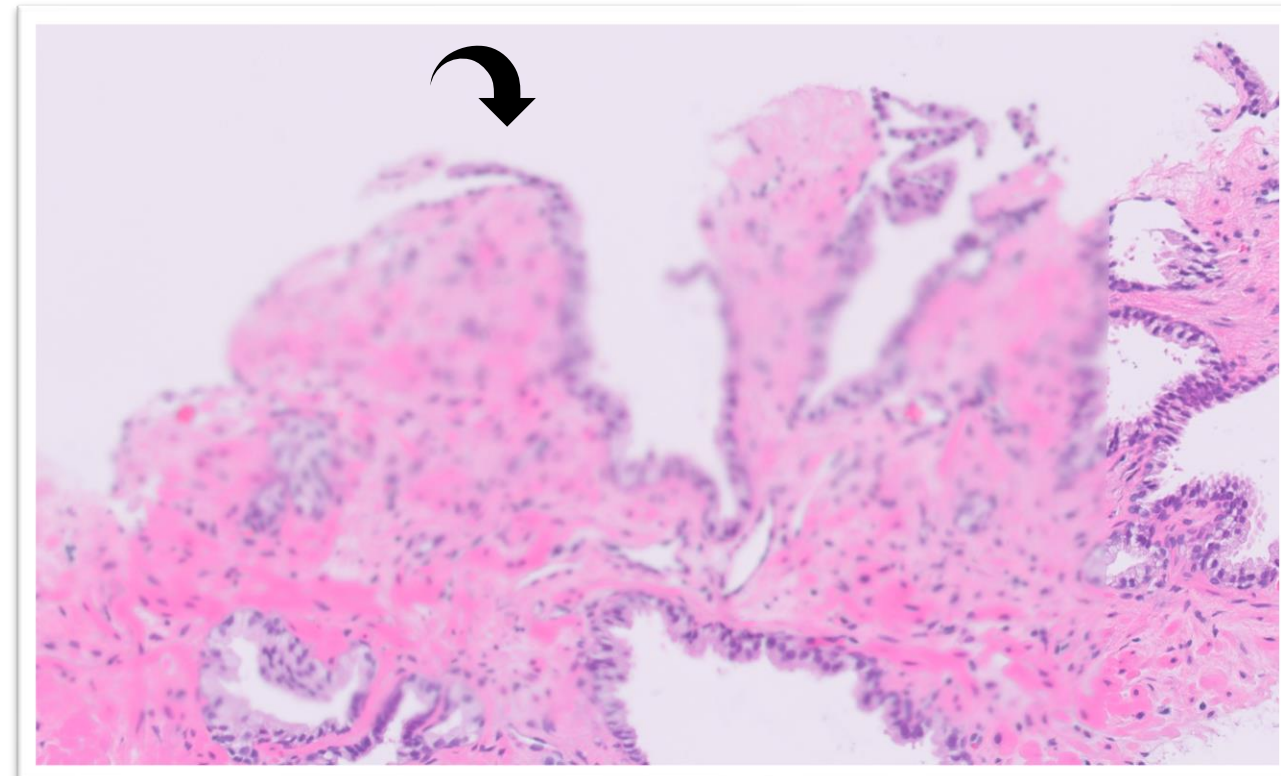
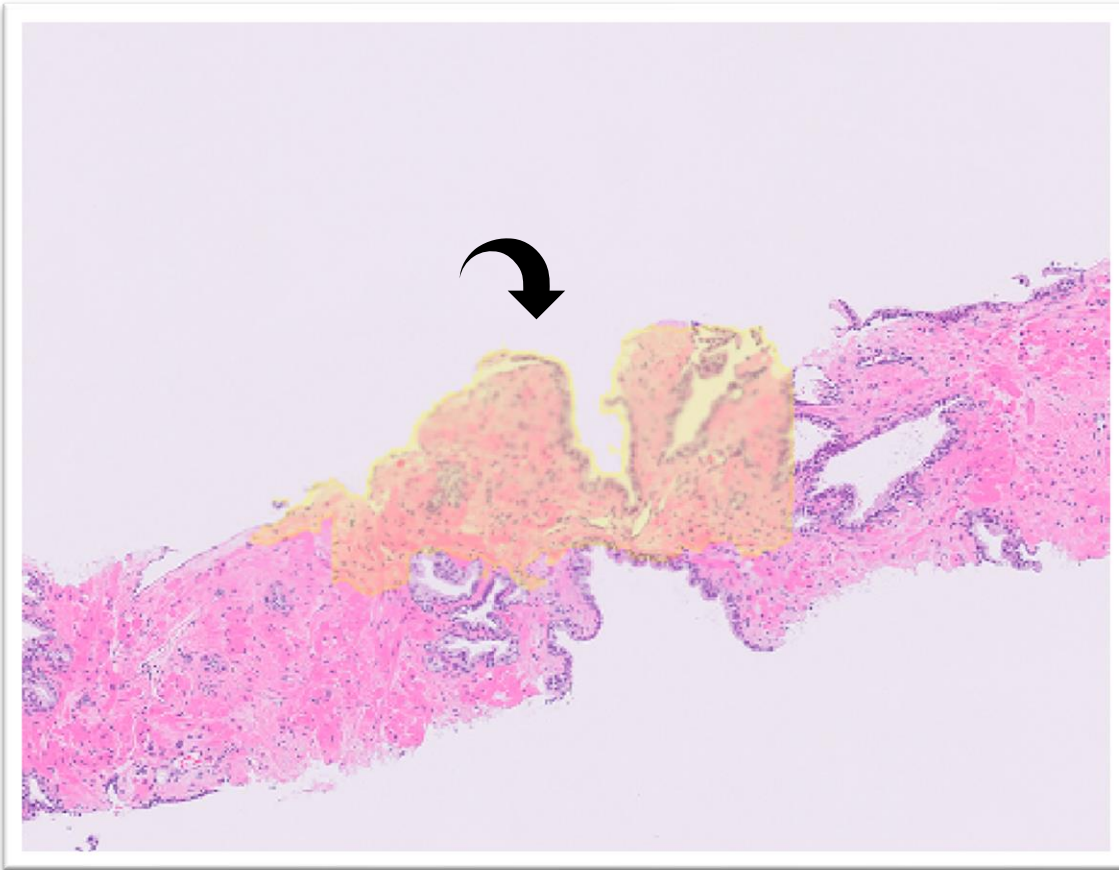


-  The image analysis system has recognized portion of this region as Grade 3 due to the presence of a knife line. **However, the region is Grade 4.**
-  The algorithm interpreted the knife line artefact as an indication of the presence of lumina, which is associated with Grade 3 morphology.

Highlighting Out of Focus Areas:

Avoiding erroneous Diagnosis of Benign

- A benign case with out-of-focus artefact
- Region removed from the analysis and flagged for pathologist intervention
- Aids in the accurate identification of malignant regions missed by the image analysis algorithm due to the presence of artefacts

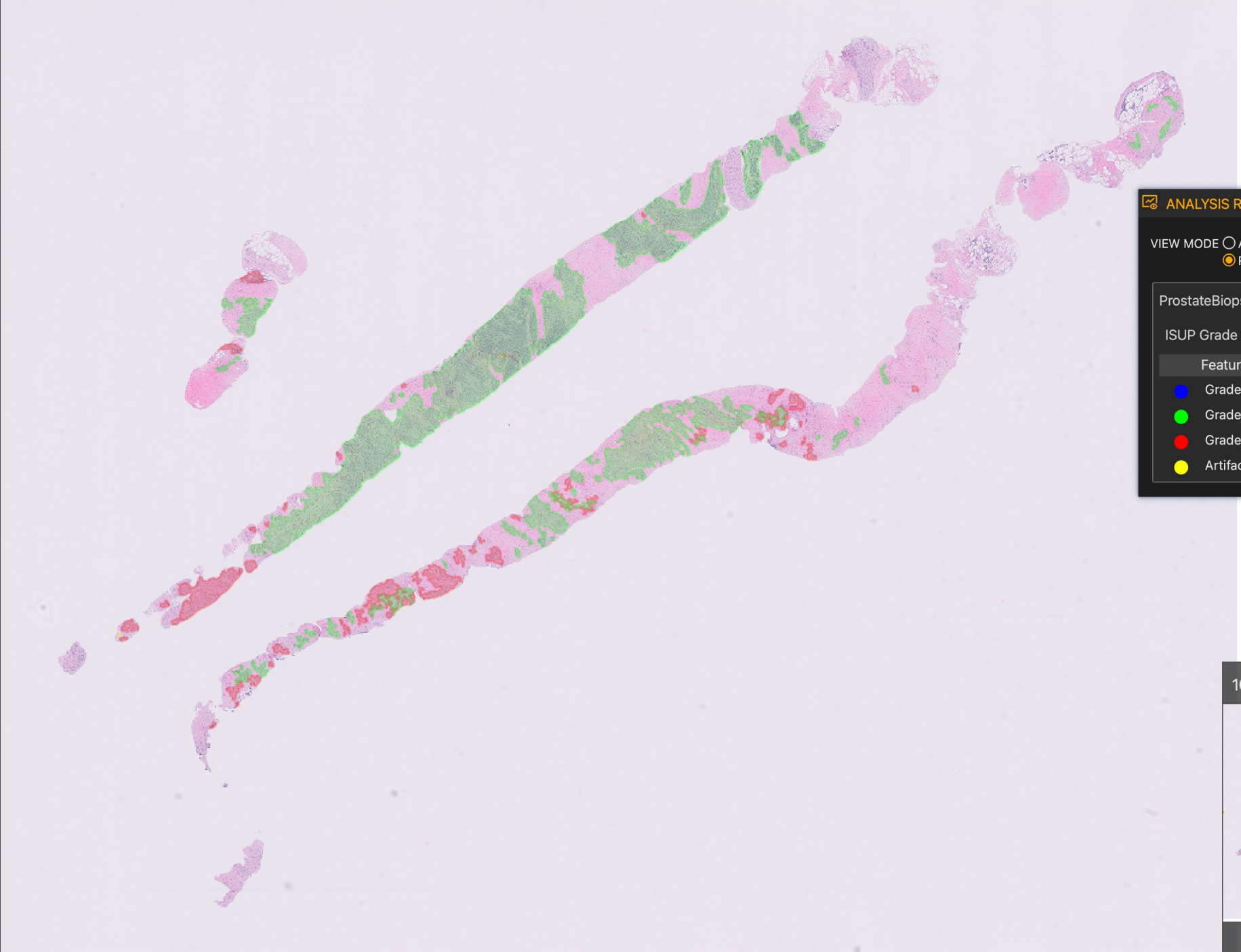


Highlighting Out of Focus Areas:

Avoiding erroneous Diagnosis of Benign



- 100% of the tissue region is out of focus
- Needs to be flagged for re-scanning before pathologist review
- Can be reported as benign by AI algorithm if no intervening QC step



0.75x

2.5x 5x 10x 20x 40x 80x

0°

ANALYSIS RESULT

VIEW MODE AI Review

OPACITY 20%

ProstateBiopsy

ISUP Grade Group: 4+5 Tumor Percentage: 31.75%

Features	Value
● Grade 3	0 %
● Grade 4	85.59 %
● Grade 5	14.41 %
● Artifact	0.01 %



- Classification methods, such as Multiple Instance Learning (MIL), are affected by inaccurate instances in the testing bag.
 - Incorrect diagnosis because of the overall classification of the whole slide image.
 - For instance, a benign sample being misclassified as cancerous. Crucial to remove instances or patches that contain artifacts during the pre-processing stage.
- Case Study:

By identifying common artefacts such as Out-of-Focus, Air bubble, Fold, Pen Marks, and Dark Spot, the performance of a Weakly Supervised Model (WSL) for Whole Slide Classification (Lung Adenocarcinoma vs. Squamous Cell Carcinoma) **is enhanced by approximately 5%.**

Classification Algorithms

Case Study: Impact of AIRAQc on Algorithm Accuracy



Case Study:

By identifying common artefacts (Out-of-Focus, Air bubble, Fold, Pen Marks, and Dark Spots) the performance of a Weakly Supervised Model (WSL) for Whole Slide Classification (Lung Adenocarcinoma vs. Squamous Cell Carcinoma) is enhanced by **approximately 5%**.

Dataset:

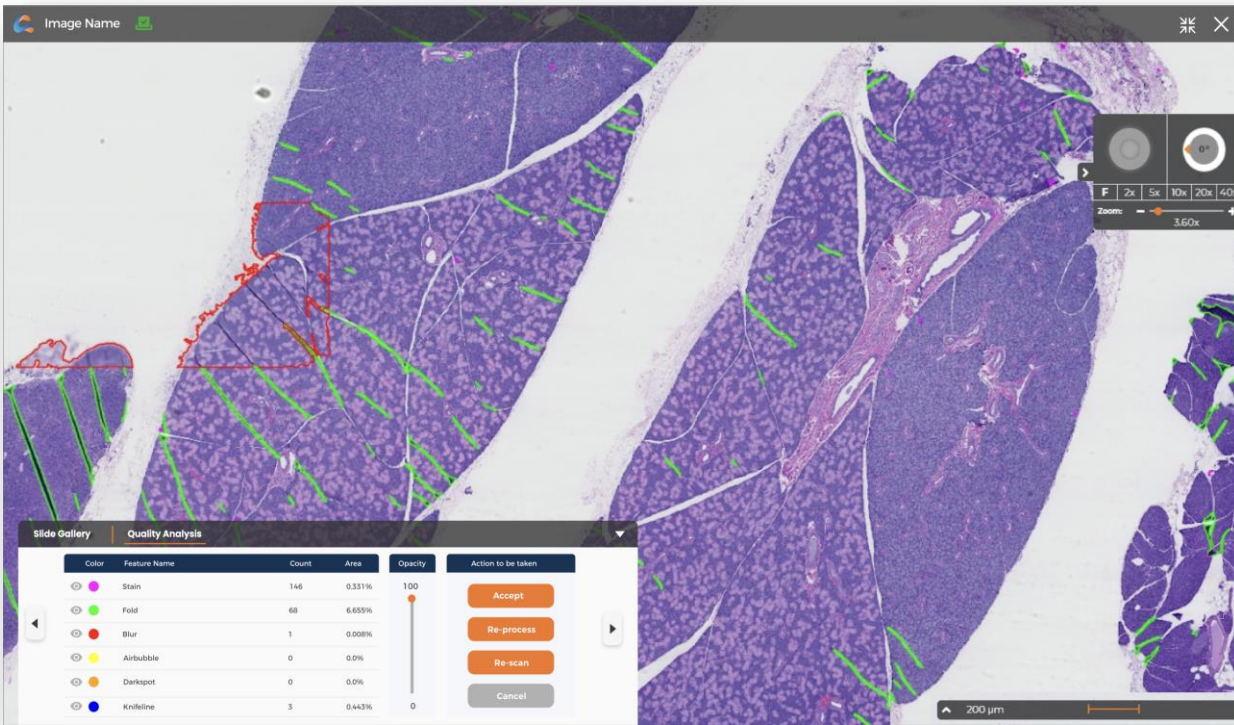
- Total # WSI: 1019 (Training:771; Testing 248)
- Labels: Lung Adenocarcinoma vs. Squamous Cell Carcinoma

Model:

- CLAM with ResNet50 feature extractor

Performance on Test Set	Accuracy (%)
Testing with artefacts	87.1
Testing after discarding the artefact regions	91.8

AIRAQc - Ensuring Speed of Preanalytical Workflows with Downstream Result Accuracy



- 🌀 Faster turnaround with **100% QC**
- 🌀 One solution for **ALL WSI**
- 🌀 **Saving on resources** with efficient automation
- 🌀 Improved downstream **AI image analysis**
- 🌀 Analytics for **effective Quality Audits**
- 🌀 Data to support Root Cause Analysis and plan Corrective, and Preventive Actions
- 🌀 **Tangible benefits** – Straightforward justification of a business case

Exhibiting at booth #5

A large graphic element consisting of a white outline of a house-like shape with a peaked top-left corner and a slanted bottom-right corner. Inside this outline, the words 'Thank You' are written in a white, clean, sans-serif font. A thick, solid blue bar is positioned at the bottom of the graphic, extending from the left edge and ending at the slanted bottom-right corner of the white outline.

Thank
You



NHS PATHOLOGY CONFERENCE



Mini Quick-Fire Panel Discussion: Cross-region learnings



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



Simon Brewer
Managing Director
South West London
Pathology



Supriya Joshi
Clinical Director
Kent and Medway
Pathology Network



NHS PATHOLOGY CONFERENCE

NHS

North West
London Pathology



Case Study

ProfilerLive



Slido

Please scan the QR Code on the screen. This will take you through to Slido, where you can interact with us.



NHS PATHOLOGY CONFERENCE





Case Study



Simon Brewer
Managing Director
South West London Pathology



ProfilerLive

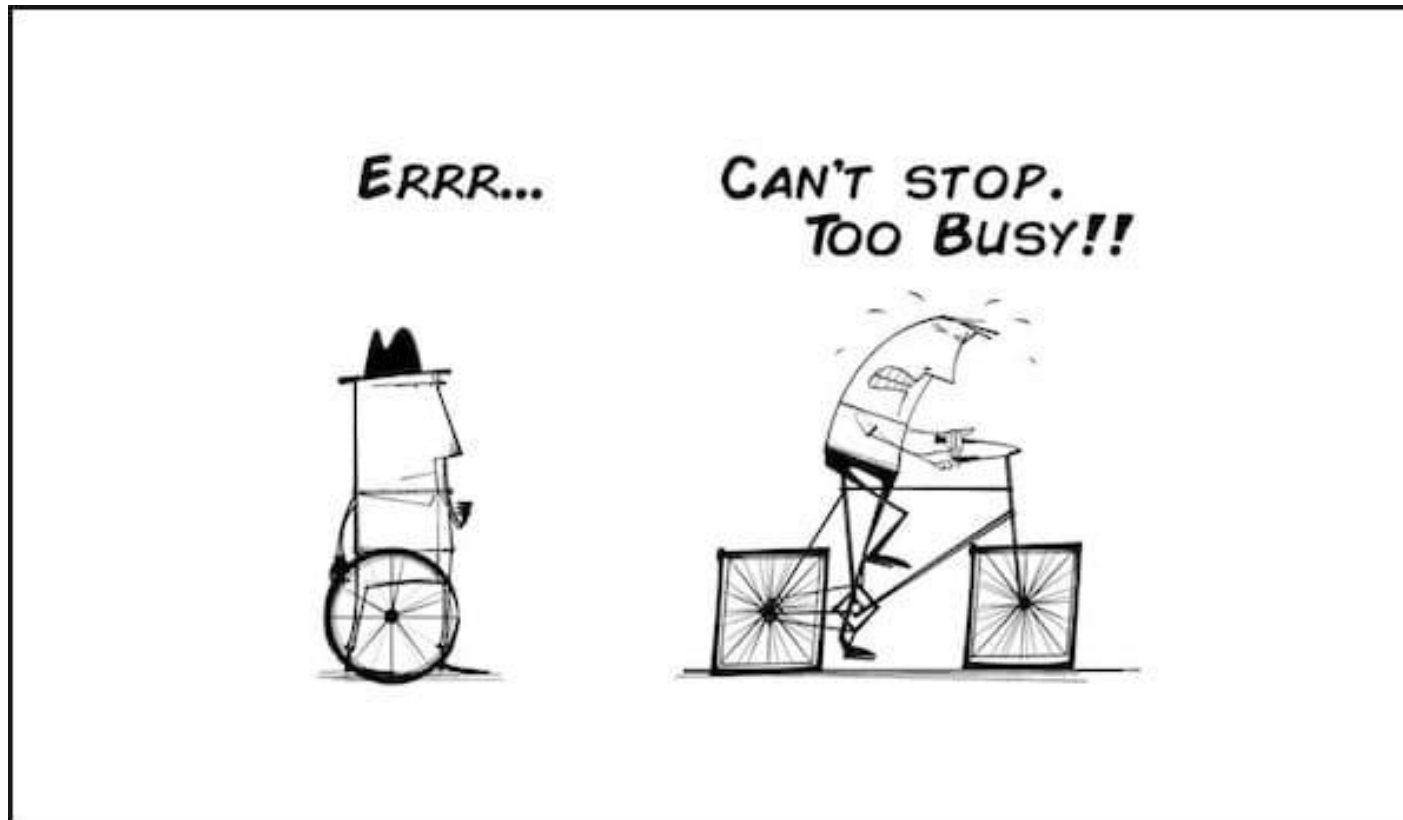


Case Study
**Investing in Staff:
ProfilerLive & SWLP**

Simon Brewer – Managing Director SWLP

25th September 2024

Too Busy to Stop! Too busy to change!



Too Busy to Improve!

SWLP Workforce Challenges – Post Pandemic

Lower productivity – Higher Costs (Increased Temp & Agency)
Legacy inconsistent Education & Training competency systems,
Poor competency evidence base, visibility and compliance
Incomplete Paper based competency files. difficult to assess and audit.
Intermittent Training of staff – when time and rosters allowed.
No network induction of staff joining SWLP.
No protected time for training or trainers.
High turnover of Staff in certain grades e.g. >30% in 12 months.
Limited progression of staff in career.
Difficulty in ESL recruitment to specific bands.

Staff Quotes

“No one to train and no-one to give the training”

“No Time to train”

“Lab work takes the priority”

“Staff have to cover the shifts so don’t get trained”



SWLP Multiple programmes to progress



Key strategies in developing SWLP 5 Year forward Plan 2022 - 2027



Release time

- Process **optimisation**
- **Automation** of processes
removal of duplication/
redundant processes
- Consolidation/centralisation
- **Increase** standardisation
- **GIRFT** initiatives
- **Service** repertoire
- **Demand** management
- **Removal** of unwarranted
processes



Create space

- **Review** space usage
- **Remove** waste
- **Decrease** clutter
- **Centralisation** of testing
- **Archive** storage offsite
- **Reconfigure** space
- **Refurbish** space
- **Move** off site



Develop staff

- Review **workforce** – mix
- Review **task/workflow**
- Use of **Middleware new technology**
- **Autolab** creation
- **Redefine** specialities
- **Multidisciplinary** working
- **New roles** (Band 3 & 4)
- New **patterns** of work



Maximise Investment

- **Refurbish** space
- **Marketing** of services
- Attract **new business**
- **Business** development
- New **technology**
- **Diversification** -
phlebotomy/water testing/
home testing/POCT in
community
- **Expansion** and **growth**

Working Differently, Creatively and with innovation

SWLP - Creating 'New' together

Vision

A NHS partnership providing a highly dependable, clinically assured and **cost-effective diagnostic** pathology service

Mission

To ensure every patient receives the required **test results and advice** for their effective diagnosis and treatment

Values

- We pursue **excellence**
- We value your **relationship** with us
- You can **depend** on us
- Making every test **matter**

Strategic Goals

1. **Optimise** our organisation in quality, efficiency, infrastructure and workforce
2. **Grow and develop** our presence to strengthen our position in the market
3. **Build** a strong customer-focused organisation

Investment Objectives

Quality – Sustained & Safe
Finance – Value & Competitive
Workforce – Flexible & Skilled

SWLP Workforce Challenges – Post Pandemic

A new approach to workforce was required to reflect our values and investment objectives...

SWLP Workforce Investment Objective

To promote enhanced educational, training and research opportunities in all partner Trusts and across the network, supporting innovative models of care and delivering a sustainable, highly skilled, trained and qualified workforce at all levels

SWLP had to invest in infrastructure and systems to make a material change in our approach and resourcing for workforce.

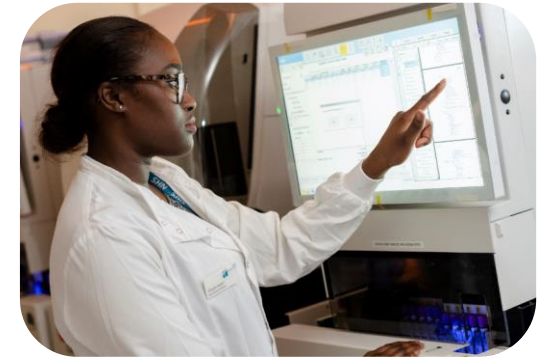
SWLP chose to invest in **ProfilerLive** to be a resource for staff to evidence quality and develop an infrastructure for Users, Tutors and Stakeholders.

SWLP aims to allocate all staff 0.5 day per month away from bench level operations for training and education.



Our Shared Mission...

- Optimise your Productivity!
- Productivity is driven by your people's Capability
- Capability = Confidence + Competence



PROFILERLIVE

Likely Training & Competency process today:

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



Digitised Content:

Programmes
Plans
Tasks

Assigned



Submitted



Signed Off



Productivity

Governance, Quality
& Safety

Enterprise Stable
Visibility



Your
Online
Solution

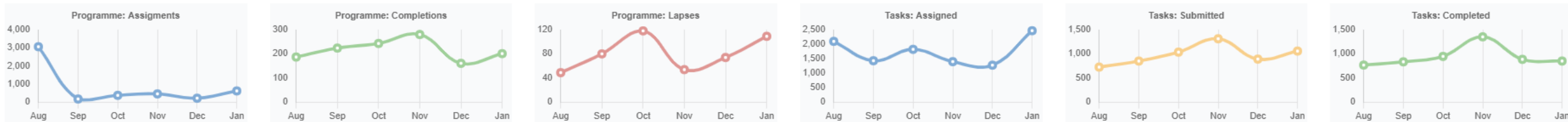
Paper Based & Spreadsheets

Real Time, Consistent, Objective



3. New Filters (Plans Not Started) Dashboard

Total Assignments Valid (5897) 44% Not Valid (1241) 9% 13525	With Active Plans (4873) Overdue (4125) 85% 0-7 Days (107) 2% Not Started (4088) 84% 36%	Due Refresh (633) Expired (507) 80% Expiring Soon (126) 20% 5%	Looking Ahead (2436) Upcoming (6) <1% Require Planning (2430) 100% 18%
---	--	---	--



Topline Plan Progress i

Upcoming 0	In Progress 100%(1)	Valid (R) 0	Lapsed (R) 0	Overdue -	Due 0-7 Days -	Due 8-14 Days -	Due 15+ Days 1	Not Started 1
-------------------	----------------------------	--------------------	---------------------	------------------	-----------------------	------------------------	-----------------------	----------------------

Programme filters

Speciality: Coagulation x Programme Group: Choose some options Programme: Choose some options Programme Level: Choose some op Rating: Choose some Active/External: - Show All - Programme Status: Choose some opti Due date: Choose some options Plan type: Choose some optior Plan State: Not Started

User filters

Learner: [Redacted] Tutor: Choose some options Site: Choose some options Department: Choose some options Band: Choose some optior Cost Centre: Choose some options Job Title: Choose some options Employment Type: Choose some optior Job Role: Choose some options

Apply Clear

Search

Name	Speciality	Programme Group	Rating	Status	Plan	Due	Days	Tasks	Progress	Tutors
1Learner	1 Speciality	1 Group			1 Plan			5	5	
[Redacted]	Coagulation	Routine Coagulation		In Progress	D-Dimer Assay (ESTH) - Initial Training v1.0 (Primary)	11/03/2024	43 days	5	5	Paul Duffy, Valentina Erazo Ospina

Start 1 to 1 of 1 entries


CSV




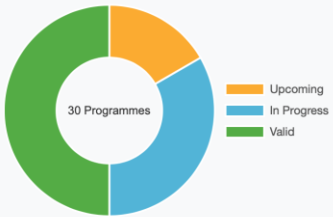
Welcome to ProfilerLive

South West London Pathology Training & Competency Hub

MY LEARNING JOURNEY


**Start**
Programmes →

**File store**
Upload files →



30 Programmes

- Upcoming
- In Progress
- Valid

**Learner guide** ↗
Quick start help → ↗

What's New?



First of the new Beckman Coulter analysers to go live at Croydon



Submitted by SWLP Comms Team on Wednesday, 04 September 2024 - 16:46
[Read more from SWLP Comms Team](#)

In mid-September, the first of the new Beckman Coulter analysers will go live at Croydon Hospital, marking the beginning of the rollout of the Beckman Coulter managed service contract.



Haval Ozgun takes the helm of rapid diagnostics at South West London Pathology



Submitted by SWLP Comms Team on Wednesday, 04 September 2024 - 16:44
[Read more from SWLP Comms Team](#)

As the newly designated General Manager for the Rapid Diagnostics and POCT, Haval has ambitious plans to transform SWLP into a leader in innovative diagnostic services, while maintaining the highest standards of patient care.



Meera Mylvaganam: Pioneering Advanced Biomedical Scientist Reaches New Heights with Rare Diagnostic Cytology Qualification



Submitted by SWLP Comms Team on Wednesday, 04 September 2024 - 16:41
[Read more from SWLP Comms Team](#)

Meera Mylvaganam is one of only 12 BMSs in the country to hold the qualification. Her journey, which began nearly two decades ago, has been marked by perseverance, dedication, and an unwavering passion for clinical work.

[Read more](#)

ProfilerLive features @ SWLP

Supporting our Transformation

- Reporting in ProfilerLive is tracked in real-time
- Ability to target time to priority High Impact / Risk competencies
- A platform for staff to access regularly (cf eRoster)
- Countless reports and configurations of data analytics
- Develop core programmes of work for eContent
- One competency covers several SOPs
- Programmes, Plan & Tasks / Learners, Tutors & Stakeholders
- Programmes planned for Induction, Operations, Technical & IT
- Integrated in all our Procurements that suppliers work with the ProfilerLive team to develop core competencies.
- Accelerated with dedicated centralised training team.
- The Competency Hub attracts staff to use the software



ProfilerLive for SWLP

- ProfilerLive optimises our Productivity
- Our Productivity is driven by our people's capability
- Capability = Confidence plus competence





NHS PATHOLOGY CONFERENCE

NHS

North West
London Pathology



Closing Panel Discussion: Pathology 2.0: Pioneering Tech Advancements Shaping Future Services



Matthew Connell
Director of Digital, Data
and IT - North West
London Pathology



Noman Manzoor
Pathology laboratory
director, GM Pathology
and transfusion Services
Great Western Hospitals
NHS Foundation Trust



NHS PATHOLOGY CONFERENCE

NHS

North West
London Pathology



Drinks and Networking



NHS PATHOLOGY CONFERENCE

NHS

North West
London Pathology



**Thank you for attending the NHS
Pathology Conference!**



**Scan here to book onto our next NHS
Pathology Conference!**