AI-Assisted Pathology Software

ANMD-MRS12-119 · Digital Health & Clinical AI Technologies

A Global Sustainability Due Diligence & Market Research Study

History 2020–2024 · Base Year 2025 · Forecast 2025–2032 · Outlooks 2035 / 2040 / 2050 · Currency US$

WHY THIS REPORT

AI-assisted pathology software analyses digitised tissue slides to detect cancer, quantify biomarkers and support diagnosis — the computational layer atop the shift from glass slides to digital pathology, spanning image analysis, cancer-detection AI, biomarker quantification and computational-pathology platforms. This decision-grade study sizes the global market three ways — value, deployments and slides analysed — across AI function, deployment and application, across seven regions and four scenarios to 2032, with outlooks to 2050.

SUSTAINABILITY & SDG IMPACT — THE ANMD LENS

The sustainability case here is social and systemic. AI pathology can improve diagnostic access, consistency and precision-oncology care, while raising bias, validation and accountability questions.

Mapped Sustainable Development Goals:

SDG 3	SDG 9	SDG 10	SDG 12	SDG 17
Good Health & Well-Being	Industry, Innovation & Infrastructure	Reduced Inequalities	Responsible Consumption	Partnerships for the Goals

Measurable sustainability outcomes assessed:

- Faster, more consistent diagnosis
- Quantified, reproducible biomarkers
- Extended pathologist reach
- Algorithmic bias, validation safety and accountability as material risks

Framework alignment: Double materiality mapped to GRI, SASB, ISSB, TCFD, TNFD, CSRD and the EU Taxonomy, with greenwashing and SDG-washing screens applied throughout.

WHAT'S INSIDE AT A GLANCE

53 Chapters	**9** Report Parts	**7** Regions Covered	**40+** Country Markets
2025–32 Forecast Horizon	**4** Forward Scenarios	**20+** Companies Profiled	**5** SDGs Mapped

REPORT COVERAGE

Geographic scope: North America, Europe, Asia Pacific, Latin America, Africa, Middle East and Rest of World — with named country intelligence. North America leads clinical adoption; Europe scales on digitisation; Asia Pacific grows fastest; other regions assessed on their own merits.

MARKET OVERVIEW

From research to regulated diagnosis — where biomarker quantification drives the highest-value use cases.

AI pathology is moving from research to regulated clinical diagnosis, riding the wave of digital-pathology adoption. Demand is driven by pathologist shortages, precision-oncology biomarker needs and digitisation across North America, Europe and Asia Pacific. The market is read three ways — value, deployments and slides analysed — and forecast under four scenarios, each region reported separately.

- **North America leads clinical adoption** — United States, on digital-pathology rollouts, FDA clearances and precision-oncology biomarker demand
- **Europe scales on digitisation** — the UK, Germany and the Netherlands, where digital-pathology programmes and CE-MDR drive uptake
- **Asia Pacific grows fastest** — China, Japan and South Korea, combining high cancer caseloads with AI investment
- **Biomarker quantification is the differentiator** — precision-oncology demand for reproducible, quantified biomarkers drives the highest-value use cases

REGIONAL OUTLOOK

Across seven reporting regions, the report separates leading markets from high-growth and emerging ones — each profiled in full rather than aggregated into Rest of World.

Region	Stage	Lead Markets & Drivers
North America	Adoption leader	United States, Canada — reimbursement, FDA pathway, enterprise EHR scale
Europe	Digitisation-driven	Germany, France, UK, Netherlands — EU MDR/AI Act, national health systems
Asia Pacific	Fastest growth	China, Japan, India, South Korea, Australia — digital-health investment
Middle East	Strategy-led	Saudi Arabia, UAE, Israel — digital-health strategy, sovereign investment
Latin America	Emerging	Brazil, Chile, Mexico — telehealth growth, access gaps
Africa	Frontier	South Africa, Egypt, Kenya — access expansion, mobile health, blended finance

KEY MARKET DRIVERS & RESTRAINTS

Drivers	Restraints
• Pathologist shortages & rising caseloads • Digital-pathology adoption & scanning • Precision-oncology biomarker demand • Diagnostic consistency & reproducibility • FDA / CE clearances & validation	• Digital-pathology infrastructure cost • Validation & regulatory burden • Pathologist trust & workflow change • Scanner / storage & integration needs • Reimbursement & ROI uncertainty

SEGMENTATION SNAPSHOT

By AI Function	Cancer-detection AI · biomarker-quantification AI · image analysis · workflow & slide-management · computational-pathology platforms
By Deployment	Cloud · on-premise · LIS / scanner-integrated
By Application	Hospitals · clinics & outpatient · home / community
By End User	Hospitals · health systems · payers · clinicians · patients
By Scale	Departmental · enterprise · health-system / national
By Business Model	SaaS subscription · per-use · managed services

TABLE OF CONTENTS — PARTS & CHAPTERS

The full report is organised into nine parts across 53 chapters, listed below. Detailed sub-headings, country tables and directories are provided in the full report.

COMPETITIVE & INVESTMENT SNAPSHOT

The competitive field spans computational-pathology specialists, diagnostics and tissue-staining majors, and digital-pathology platform players. Deal activity — FDA clearances, pharma biomarker partnerships and digital-pathology integration — signals a market consolidating around regulated, precision-oncology diagnosis.

Representative players profiled in the full report:

Paige.AI, Inc. · PathAI, Inc. · Ibex Medical Analytics Ltd. · Roche Holding AG (Ventana) · Koninklijke Philips N.V. · and further profiled players across computational-pathology specialists and majors.

Investment intelligence: venture, infrastructure, development, climate and blended finance, green bonds and sustainability-linked loans — culminating in a bankability assessment and a conditional investment view.

KEY QUESTIONS THIS REPORT ANSWERS

- How large is the global AI pathology market, and how fast will it grow to 2032?
- Which regions, countries and segments offer the strongest risk-adjusted opportunity?
- How does biomarker quantification change value versus detection-only AI?
- Who leads, and where is the competitive and patent white space?
- Is the investment case bankable — and under what conditions?
- How does the category align with the SDGs, diagnostic access and responsible-AI governance?

WHY ANMD — THE DIFFERENCE

Most market studies stop at units and revenue. This report is built as a sustainability due diligence instrument — fusing market sizing with ESG, SDG, climate, water and natural-capital intelligence and a decision-ready bankability view in a single architecture.

- **Triangulated sizing** — every market read three ways so value, volume and the physical-unit views reconcile rather than conflict.
- **Region-honest forecasting** — Latin America, Africa and the Middle East reported in full, never hidden inside Rest of World, every forecast resolved to the 2025 base year.
- **Integrated evidence base** — company, patent and project databases linked to the analysis, with published-filing patents and FTO treated as an indicator, not a legal conclusion.
- **No-fabrication discipline** — every estimate carries a data-confidence rating and disclosed sources; gaps are flagged for further diligence, never filled with invented numbers.
- **Anti-greenwashing rigour** — SDG-washing and greenwashing screens plus claim-substantiation checks built into the ESG and project analysis.
- **Decision-first structure** — 9 Parts and 53 Chapters culminating in stakeholder playbooks and a clear, conditional investment view.

WHO SHOULD BUY THIS REPORT

Investors, OEMs, health systems, payers, clinicians, lenders and policymakers, and strategic corporate planners and decision-makers.

Access the Full Report

The complete report delivers all 53 chapters in full, with every sub-heading, country table, company and patent directory, forecast model and due diligence checklist.

Purchase at **www.anewmarketdynamics.com** · Standard & Premium licences · Single-Site (SSL) and Global-Site (GSL) options at checkout.

Want the Complete Detailed Table of Contents?

This prospectus lists the nine parts and 53 chapters. The complete detailed table of contents — every sub-heading, country table, exhibit, company and patent directory and annex — is available on request to registered users. To receive it, register with your official company email at **www.anewmarketdynamics.com**. The full detailed table of contents will be sent directly to your registered company email address.