# Growth in AI in pathology market projected to reach USD 169.8 million by 2029



A new report from ResearchAndMarkets.com has highlighted a significant growth trajectory in the AI in Pathology market, projecting it will reach a value of USD 169.8 million by 2029, up from USD 82.8 million in 2024. The report details a compound annual growth rate (CAGR) of 15.4% during the forecast period, indicating robust interest and investment in this sector of the healthcare industry, primarily focused on utilising artificial intelligence (AI) for pathology applications.

AI in pathology encompasses the development and use of advanced AI technologies to enhance various aspects of pathology, including diagnostics and image analysis. These AI models help healthcare professionals analyse clinical data, genomic information, and monitor disease progression. This analysis supports personalised treatment planning, identifies high-risk patients, and optimises healthcare resource allocation. Advanced algorithms, computer vision, and machine learning underpin the improved efficiency in extracting and analysing relevant information from pathology images.

In 2023, the drug discovery segment held the largest market share in this burgeoning field, largely attributed to the increasing demand for efficient and cost-effective drug development. AI plays a critical role in expediting the drug discovery process by streamlining data analytics and swiftly identifying potential drug candidates. Significant advancements in high-throughput imaging technologies and the application of AI in toxicology testing are also driving this sector's growth. The reduction in time and costs associated with traditional methodologies makes AI an appealing option for pharmaceutical companies, especially as they seek to enhance innovation and maintain competitiveness.

Furthermore, the pharmaceutical and biopharmaceutical companies segment is projected to grow at the fastest rate during the forecast period. The growing number of strategic collaborations between these companies and AI technology providers is contributing to a rapid adoption of advanced tools that improve drug development processes. The ability of AI to process large datasets and recognise patterns significantly enhances predictive capabilities regarding treatment responses, thus improving efficiency.

North America leads the AI in pathology market, holding the largest share in 2023, driven by high acceptance of AI technology and substantial investments in research and development. Major companies, such as Koninklijke Philips N.V., reportedly invested approximately USD 895 million in R&D for diagnostic and treatment technologies. Access to sophisticated healthcare infrastructures, combined with an extensive patient base and data availability, facilitates the training of AI models to achieve greater efficiency and accuracy in pathology outputs.

Key players in the AI in pathology market include prominent companies such as Koninklijke Philips N.V., F. Hoffmann-La Roche Ltd, and Hologic, Inc., among others. The report outlines various factors influencing the market's growth, including the rising cases of misdiagnosis, increased demand for personalised medicine, and the integration of advanced technologies in healthcare practices. Conversely, challenges remain, including the high costs associated with digital pathology systems, limited expertise in AI, and ongoing regulatory complexities.

As AI continues to integrate into pathology, the market is expected to evolve, with opportunities for innovation in personalised medicine and predictive analytics becoming increasingly critical. The analysis encompasses both the existing landscape and projections for the future, offering insights into successful strategies and emerging trends in the field of AI in pathology.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.researchandmarkets.com/reports/5893794/ai-in-pathology-market-component-neural> - Corroborates the growth trajectory of the AI in Pathology market, including the projected value and CAGR.
2. <https://www.businesswire.com/news/home/20231106340960/en/AI-in-Pathology-Market-Research-Report-2023-2028-Focus-on-Drug-Discovery-Diagnosis-Prognosis-Workflow-Education-Pharma-Biotech-Hospital-Labs-m-Research---ResearchAndMarkets.com> - Details the use of AI in pathology for diagnostics, image analysis, and other applications, as well as the market share of the drug discovery segment.
3. <https://www.businesswire.com/news/home/20231106340960/en/AI-in-Pathology-Market-Research-Report-2023-2028-Focus-on-Drug-Discovery-Diagnosis-Prognosis-Workflow-Education-Pharma-Biotech-Hospital-Labs-m-Research---ResearchAndMarkets.com> - Explains the role of AI in expediting the drug discovery process and the growth drivers for pharmaceutical and biopharmaceutical companies.
4. <https://www.marketsandmarkets.com/Market-Reports/ai-in-pathology-market-86647266.html> - Supports the forecasted growth of the AI in pathology market, including the projected value and CAGR, and the advantages of AI in pathology such as accurate results and efficiency.
5. <https://www.businesswire.com/news/home/20231106340960/en/AI-in-Pathology-Market-Research-Report-2023-2028-Focus-on-Drug-Discovery-Diagnosis-Prognosis-Workflow-Education-Pharma-Biotech-Hospital-Labs-m-Research---ResearchAndMarkets.com> - Highlights the pharmaceutical and biopharmaceutical companies segment as the fastest-growing end-user segment and the strategic collaborations driving this growth.
6. <https://www.businesswire.com/news/home/20231106340960/en/AI-in-Pathology-Market-Research-Report-2023-2028-Focus-on-Drug-Discovery-Diagnosis-Prognosis-Workflow-Education-Pharma-Biotech-Hospital-Labs-m-Research---ResearchAndMarkets.com> - Details the North American market's leadership in AI in pathology, driven by investments in research and development and access to sophisticated healthcare infrastructures.
7. <https://www.businesswire.com/news/home/20231106340960/en/AI-in-Pathology-Market-Research-Report-2023-2028-Focus-on-Drug-Discovery-Diagnosis-Prognosis-Workflow-Education-Pharma-Biotech-Hospital-Labs-m-Research---ResearchAndMarkets.com> - Lists key players in the AI in pathology market, such as Koninklijke Philips N.V., F. Hoffmann-La Roche Ltd, and Hologic, Inc.
8. <https://www.researchandmarkets.com/reports/5893794/ai-in-pathology-market-component-neural> - Discusses the factors influencing market growth, including the rising cases of misdiagnosis and the demand for personalized medicine.
9. <https://www.marketsandmarkets.com/Market-Reports/ai-in-pathology-market-86647266.html> - Explains the integration of advanced technologies in healthcare practices and the benefits of AI in pathology, such as accurate results and better patient care.
10. <https://www.businesswire.com/news/home/20231106340960/en/AI-in-Pathology-Market-Research-Report-2023-2028-Focus-on-Drug-Discovery-Diagnosis-Prognosis-Workflow-Education-Pharma-Biotech-Hospital-Labs-m-Research---ResearchAndMarkets.com> - Addresses the challenges in the AI in pathology market, including high costs, limited expertise, and regulatory complexities.
11. <https://www.marketsandmarkets.com/Market-Reports/ai-in-pathology-market-86647266.html> - Outlines the future evolution of the AI in pathology market, including opportunities for innovation in personalized medicine and predictive analytics.
12. <https://news.google.com/rss/articles/CBMi4AJBVV95cUxPSEFGMFVpZ1BZaWtIT2hNQ3JXNmR3VmhVMV9xWVRJX3lYeGRTdTV4YmZpbEI5YmV6emxVNGNkS2dMQjZRZk1JdVFYa1A1SFdfanRCMzdoX2hYUEJNVDZwSUo3M0hycUNfRFVfTlZlclFSQTYtUmFGYWk0bUlUeFpnQi1TSUtVZXpPTHhVdmZ0WHdJel9CQzhzT29oYUZLVUM0bktqeEZvMGY1NFQtUnhETzdnYm8yamU5UkdjSGFwejFmR216cUNmT1NpczYzcTBsTXdLYVYyLUg5TFpPYy1xanpHSHNQM2NDRW5GUjVadWZYZHJHa2tqRnZtVHRKRTVjTnhEVTBrM0NLY1JxRENhaGFkeUhEOGZNMWU0ZXFOMlZ2dkJSRXppZXQ4TGtuTUNITFZfN3ZveEJjMXhVTmcyRENEV2d3TE1jY1kzT1hNLTk5RWFBNUgzM2V2SkRGdVVD?oc=5&hl=en-US&gl=US&ceid=US:en> - Please view link - unable to able to access data