

## EDITORIAL

### Digital pathology in Malaysia

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In this issue, we published a review article by Jariyapan et al. (2025)<sup>1</sup>, describing the workflow in incorporating digital pathology and artificial intelligence in diagnostic pathology. The era of Covid has taught us to be innovative and digital health has become popular.<sup>2</sup> Digitalisation of laboratories is an increasing trend in Malaysia. Many laboratories are offering whole slide imaging services and are working toward establishing artificial intelligence assisted diagnostic services, which could potentially improve turn-around-time and diagnostic accuracy. Table 1 shows the list of publications related to digital pathology and artificial intelligence in Malaysia. We acknowledge and apologise that some articles might not be listed. Several guidelines for the implementation of digital pathology have been published from namely the College of American Pathologists (CAP)<sup>3</sup>, the Royal College of Pathologists, United Kingdom (RCPATH)<sup>4</sup>, European Society of Digital and Integrative Pathology (ESDIP)<sup>5</sup> and the Royal College of Pathologists of Australasia (RCPA).<sup>6</sup> An important step before implementing digital pathology service is to conduct a validation study to establish the concordance between digital and glass slides and obtain a concordance of >95%. Interestingly, a systematic review of 23 articles on digital pathology revealed 4.2% discordance, of which 85% light microscopy diagnosis were preferred, while 13% digital diagnosis were preferred. Two percent were equivocal.<sup>3</sup> The College of Pathologists Malaysia is also working towards establishing a guideline for the implementation of digital pathology in Malaysia.

**Keywords:** Artificial intelligence, concordance, digital pathology, whole slide imaging

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**Table 1: List of publications related to digital pathology and artificial intelligence in Malaysia between 2018 to 2024**

No	Title	Journal	Authors (year)
1	Deep-Learning-Based Approach in Cancer-Region Assessment from HER2-SISH Breast Histopathology Whole Slide Images	Cancers (Basel).	Rehman <i>et al.</i> 2024
2	Computational approach for counting of SISH amplification signals for HER2 status assessment.	PeerJ Comput Sci.	Rehman <i>et al.</i> 2024
3	Review of In Situ Hybridization (ISH) Stain Images Using Computational Techniques.	Diagnostics (Basel).	Rehman <i>et al.</i> 2024
4	The Role of Machine Learning and Deep Learning Approaches for the Detection of Skin Cancer.	Healthcare (Basel).	Mazhar <i>et al.</i> 2023
5	Artificial Intelligence in Pathology	Malays J Med Health Sci.	Razana <i>et al.</i> 2023
6	Pancreatic cancer grading in pathological images using deep learning convolutional neural networks.	F1000Res.	Mohamad Sehmi <i>et al.</i> 2022
7	Allred Scoring of ER-IHC Stained Whole-Slide Images for Hormone Receptor Status in Breast Carcinoma.	Diagnostics (Basel).	Ahmad Fauzi <i>et al.</i> 2022

8	Visual-spatial dimension integration in digital pathology education enhances anatomical pathology learning.	BMC Med Educ.	Wan <i>et al.</i> 2022
9	Visualising Digital Pathology Research: A Bibliometric Analysis from 1991-2021.	Malays J Med Health Sci.	Rafidah <i>et al.</i> 2022
10	Digital pathology as a solution for working from home.	Malays J Pathol.	Tan <i>et al.</i> 2021
11	Opportunity in a time of crisis: New technology in pathology	Malays J Pathol.	Tan <i>et al.</i> 2021
12	Absolute cosine-based SVM-RFE feature selection method for prostate histopathological grading.	Artif Intell Med.	Sahran <i>et al.</i> 2018

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