Title	Author	Year	Dataset name and URL	Total Data	Categories	Model	Accuracy of the Model (%)	Research Questions	Pros and Cons	Citation
Automating cancer diagnosis using advanced deep learning techniques for multi-cancer image classification	Kumar et. al	2024	SIPaKMeD dataset https://www.kaggle.com/datasets/obulisainaren/multi-cancer	4049	5	NASNetMobile, DenseNet201, VGG19, ResNet152V2	99.26, 99.46, 99.79, 99.80		Pros:demonstrates the significant potential of AI-based deep learning Cons:Limited Cancer Types,data size etc	
Cervical cancer diagnosis using convolution neural network: feature learning and transfer learning approaches		2023	Herlev dataset https://www.kaggle.com/datasets/yuvrajsinhachowdhury/herlev-dataset	917	7	ResNet, GoogleNet	92.03, 96.01		Pros:enhancing the accuracy and efficiency of cancer detection and classification Cons:Lack of generalization	
Development and validation of artificial intelligence-based analysis software to support screening system of cervical intraepithelial neoplasia		2024	Tele cervicography Images	400	4	CerviCARE AI	97.5			

Cervical Cancer Detection: A Comprehensive Evaluation of CNN Models, Vision Transformer Approaches		2025	SkipMed dataset https://www.kaggle.com/datasets/andrewmvd/sipakmed-cervical-cell-dataset	4049	5	ViT-Cerv, HViT-Cerv	94%, 97-99%		Pros: Vision Transformers demonstrate superior feature extraction and robustness, achieving near-perfect accuracy when combined with CNN fusion strategies. Cons: High computational cost, small dataset overfitting, poor generalization, low interpretability, complex architecture, class imbalance, and limited real-world validation.	
Automated Cervical Cancer Detection Using Image Processing and Deep Learning Model	Devi. S et al	2025	Cervical Cell Image Dataset	4049	5		**96.03 %**	How can deep learning models improve accuracy and consistency in cervical cancer cell classification compared to manual evaluation? Can CNNs	**Pros:** High classification accuracy (96.03%); Reduces human error and diagnostic workload; Provides consistent, automated analysis. **Cons:** Requires large labeled datasets; May	5

								reduce pathologists' workload in routine screening?	lack interpretability; Potential domain shift issues in real-world clinical settings.	

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