**Summary From the recent research**

Monkeypox Skin Lesion Detection with Deep Learning and Machine Learning:  
<https://www.kaggle.com/datasets/nafin59/monkeypox-skin-lesion-dataset>

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| Author | Year | Dataset | Data Split | Model | Total Data | Learning Type | Overall Accuracy |
| Saznila Islam, Fhamida Akter Nishi, Tahmina Akter, Muhammad Anwarul Azim | 2023 | Kaggle dataset | 80% - 20% | VGG19 | 1040 | Supervised | 99.52% |

Achievements:

VGG19 with 99.52% accuracy on custom 3-class dataset, wide model comparison, extensive tuning.

Limitations:

Custom data from the web, limited categories.

Vision transformer and CNN-based skin lesion analysis: classification of monkeypox: <https://data.mendeley.com/datasets/zr7vgbcyr2/1> and <https://www.kaggle.com/datasets/nafin59/monkeypox-skin-lesion-dataset>

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| Author | Year | Dataset | Data Split | Model | Total Data | Learning Method | Overall Accuracy |
| Gozde Yolcu Oztel | 2024 | Mendeley Dataset (Skin Cancer) + Kaggle dataset (Monkey Pox) | 80% -20% | ViT + DenseNet201 | 2298 + 102 | Supervised | 81.91% |

Achievements:

ViT + DenseNet ensemble for 7-class classification, robust ensemble + transfer learning, rich performance metrics (Jaccard Index Added due to highly imbalance data).

Limitations:

Small dataset, limited sample monkeypox.