دانشگاه علوم پزشکی و خدمات بهداشتی، درمانی ایران

Artificial Intelligence in Otolaryngology

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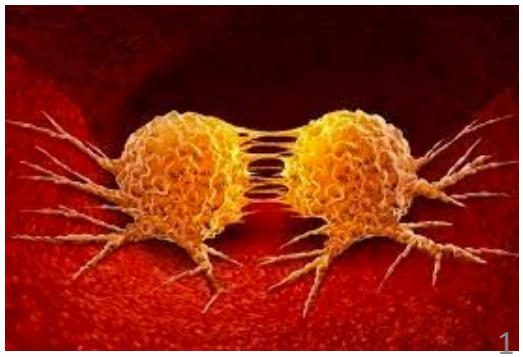
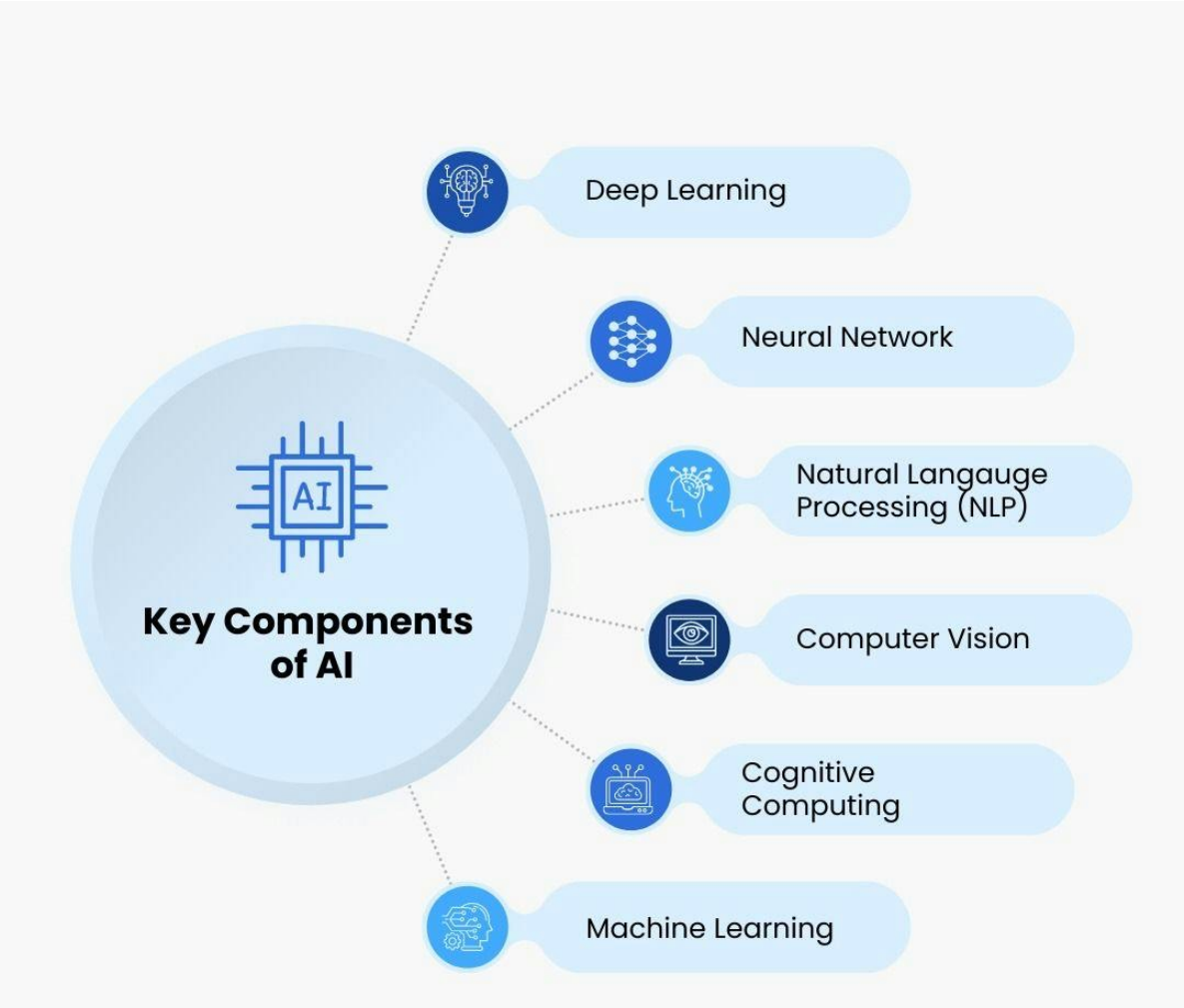
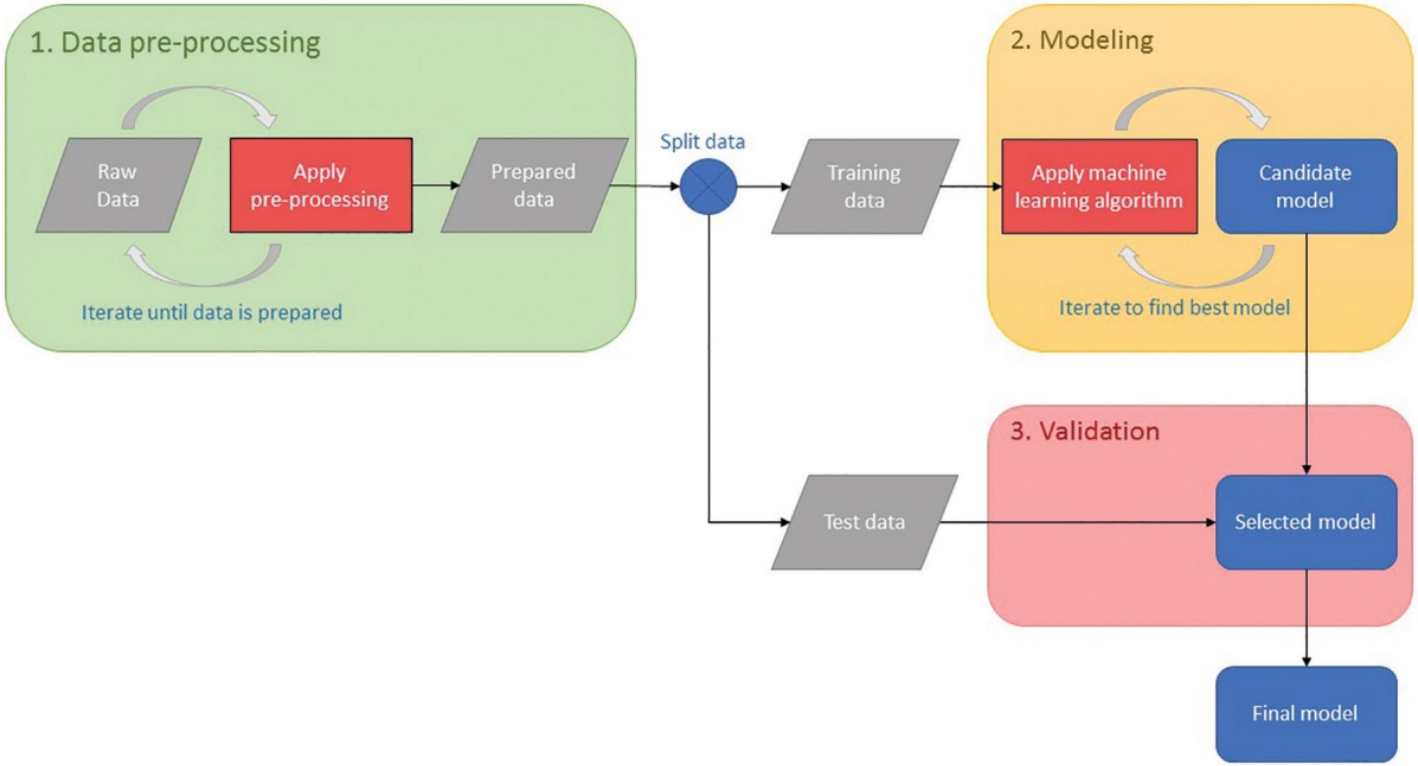


Artificial Intelligence (AI)



How is AI generally used?

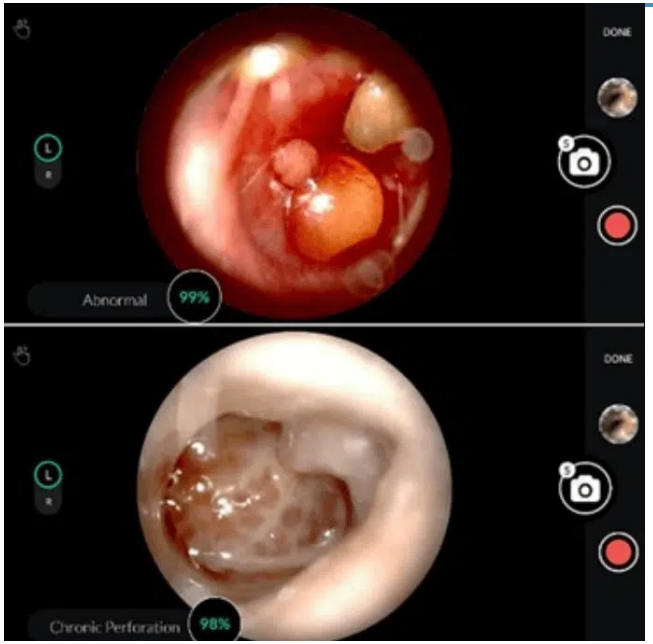
The 3 stages of machine learning modeling. Data are first preprocessed. Next, prepared training data are input into machine learning algorithms to identify the best model. Finally, the model's performance is validated with test data.



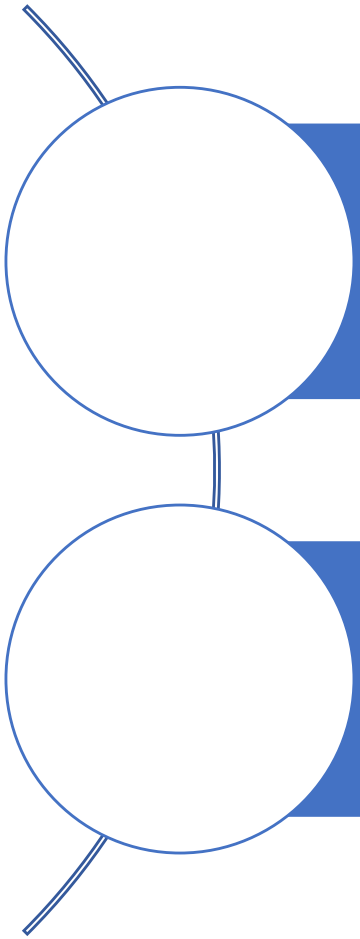
Scientific Reports **volume 13**, Article number: 16204 (2023)

Otolaryngology and Telehealth

- The HearScope system employs two AI systems in classifying otoscopy images. The first screens whether the image is of the ear canal and tympanic membrane. If an ear canal is confirmed, the second neural network classifies the images in one of four categories: normal, wax obstruction, chronic perforations and abnormal.



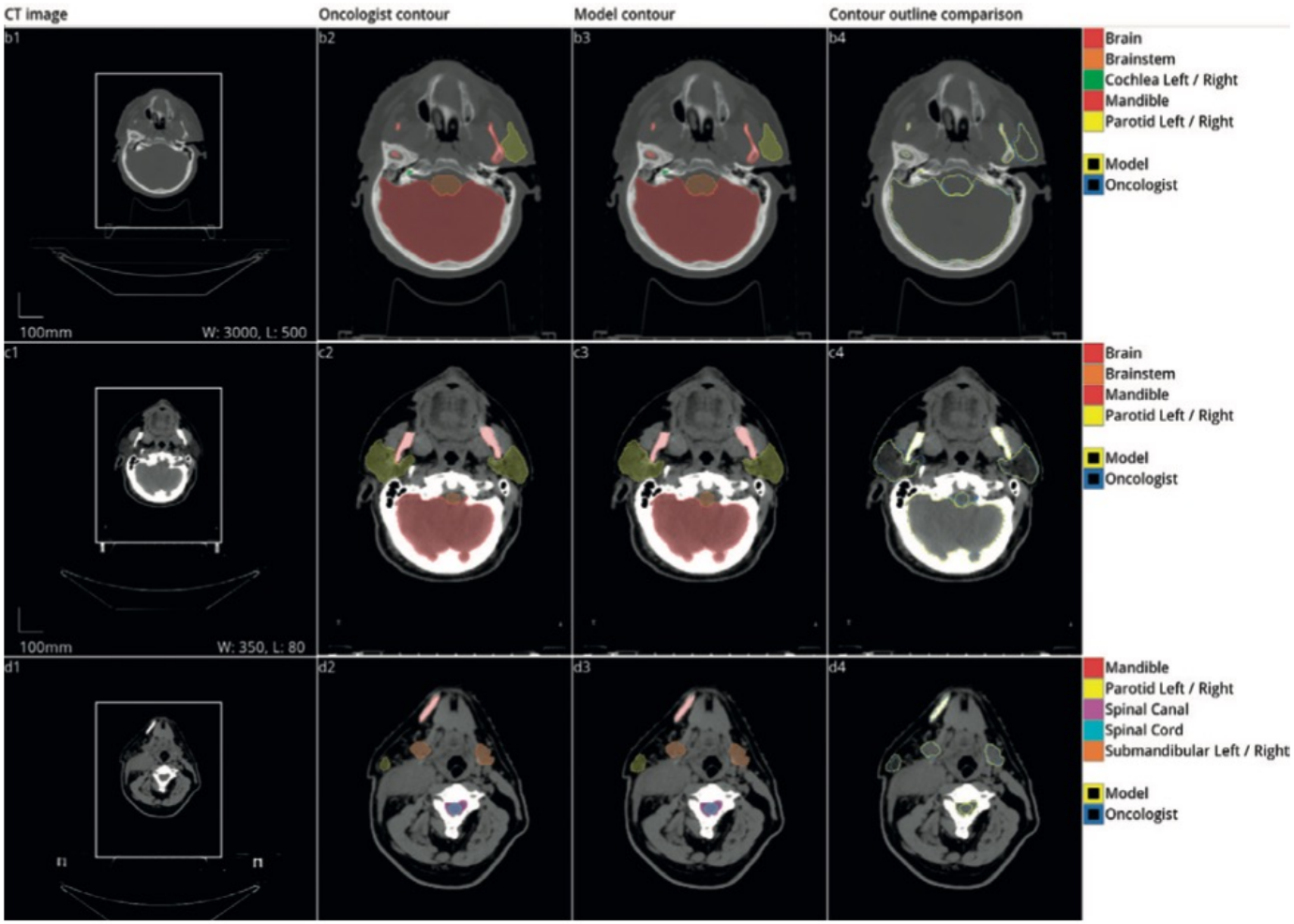
AI for accurate online testing for for rural and remote areas



Automatically classify auditory brainstem responses

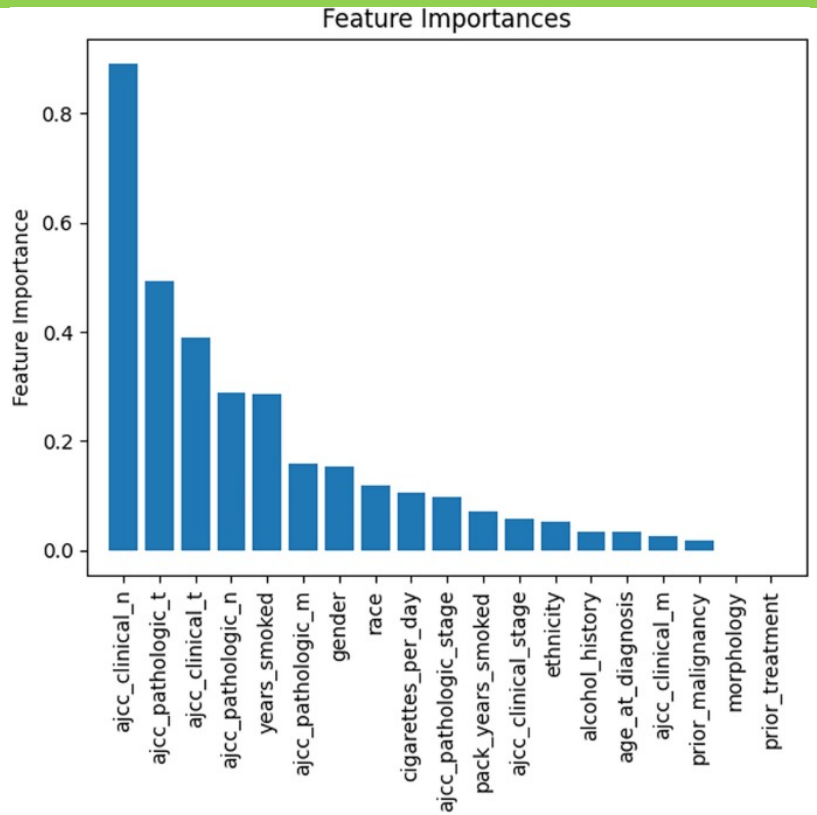
Estimate audiometric thresholds

Automated segmentation of organs at risk of damage from radiation during radiotherapy for head and neck cancer



Multimodal artificial intelligence-based pathogenomics improves survival prediction in oral squamous cell carcinoma

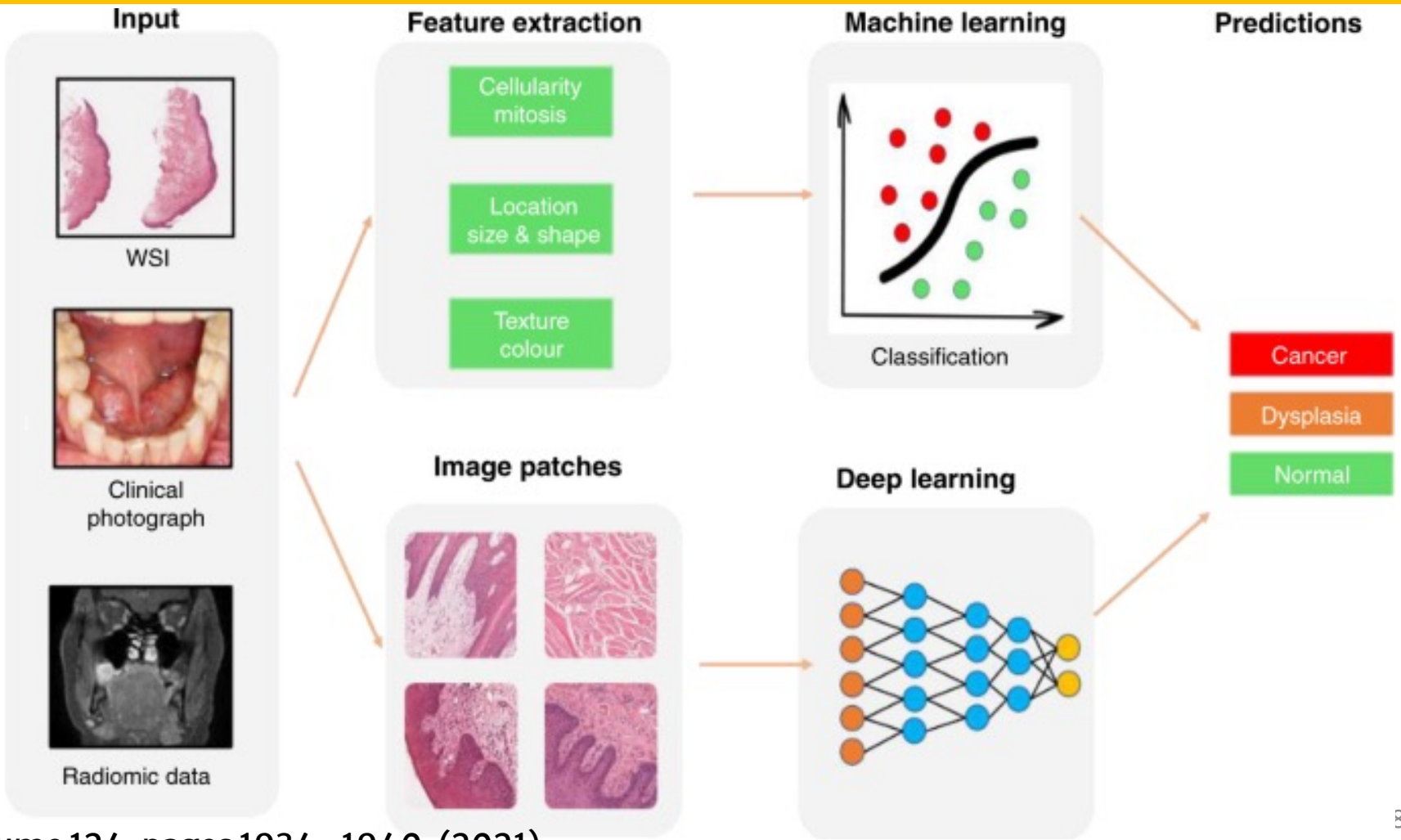
a novel prognostic algorithm for oral squamous cell carcinoma (OSCC) using a combination of pathogenomics and AI-based techniques is we aimed to developed.



Scientific Reports **volume 14**, Article number: 5687 (2024)

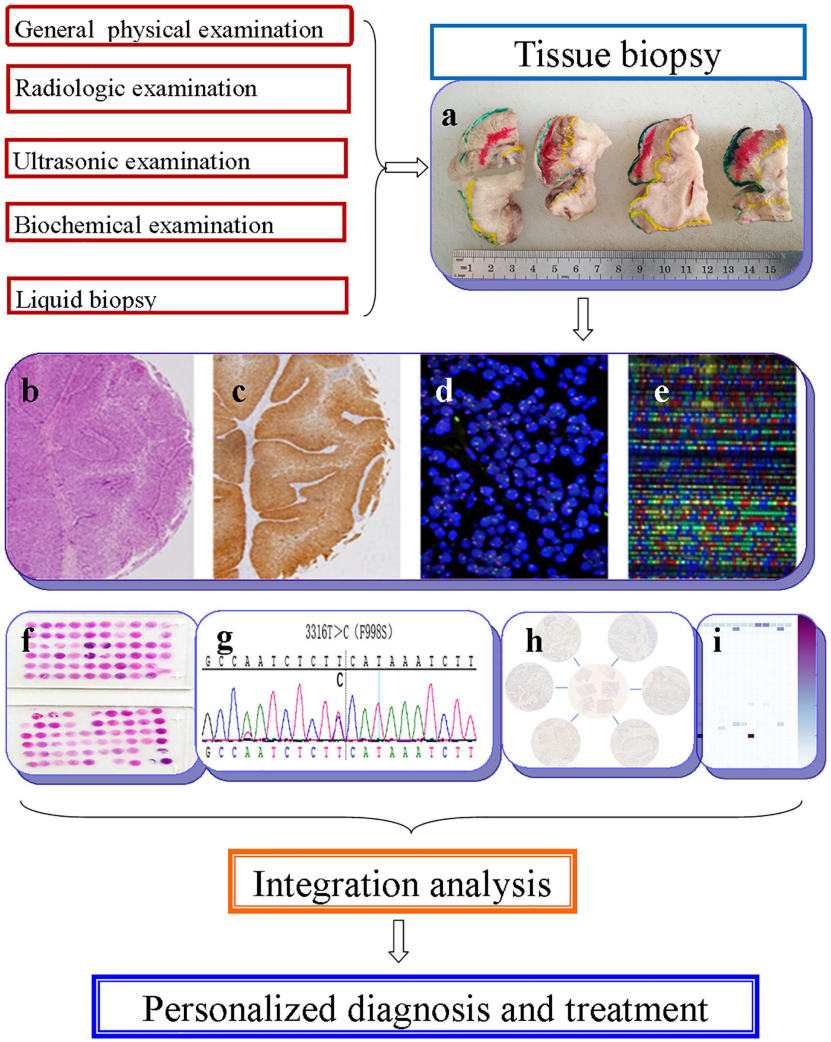
Artificial Intelligence-based methods in head and neck cancer diagnosis

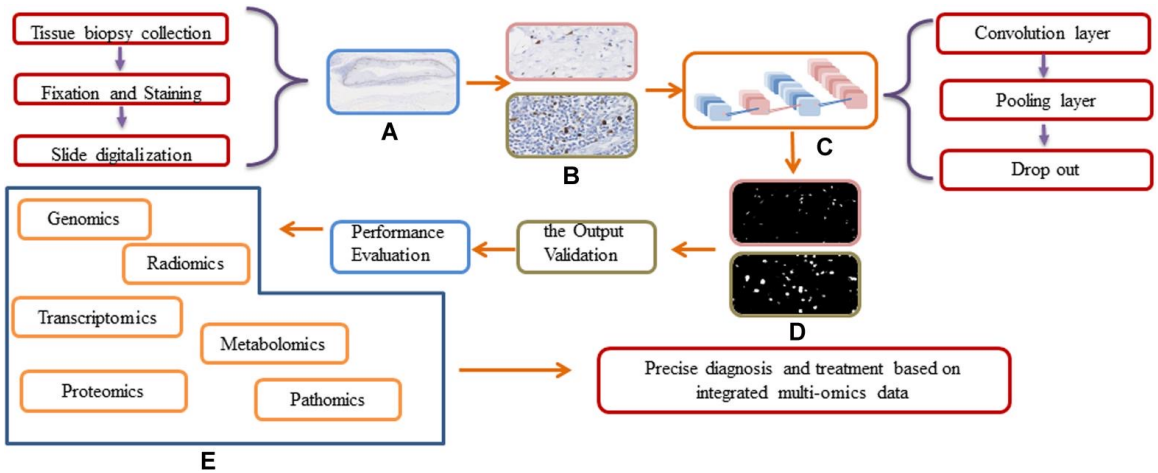
Machine Learning (AI/ML) methods for diagnostic evaluation of head and neck cancers (HNC) using automated image analysis.



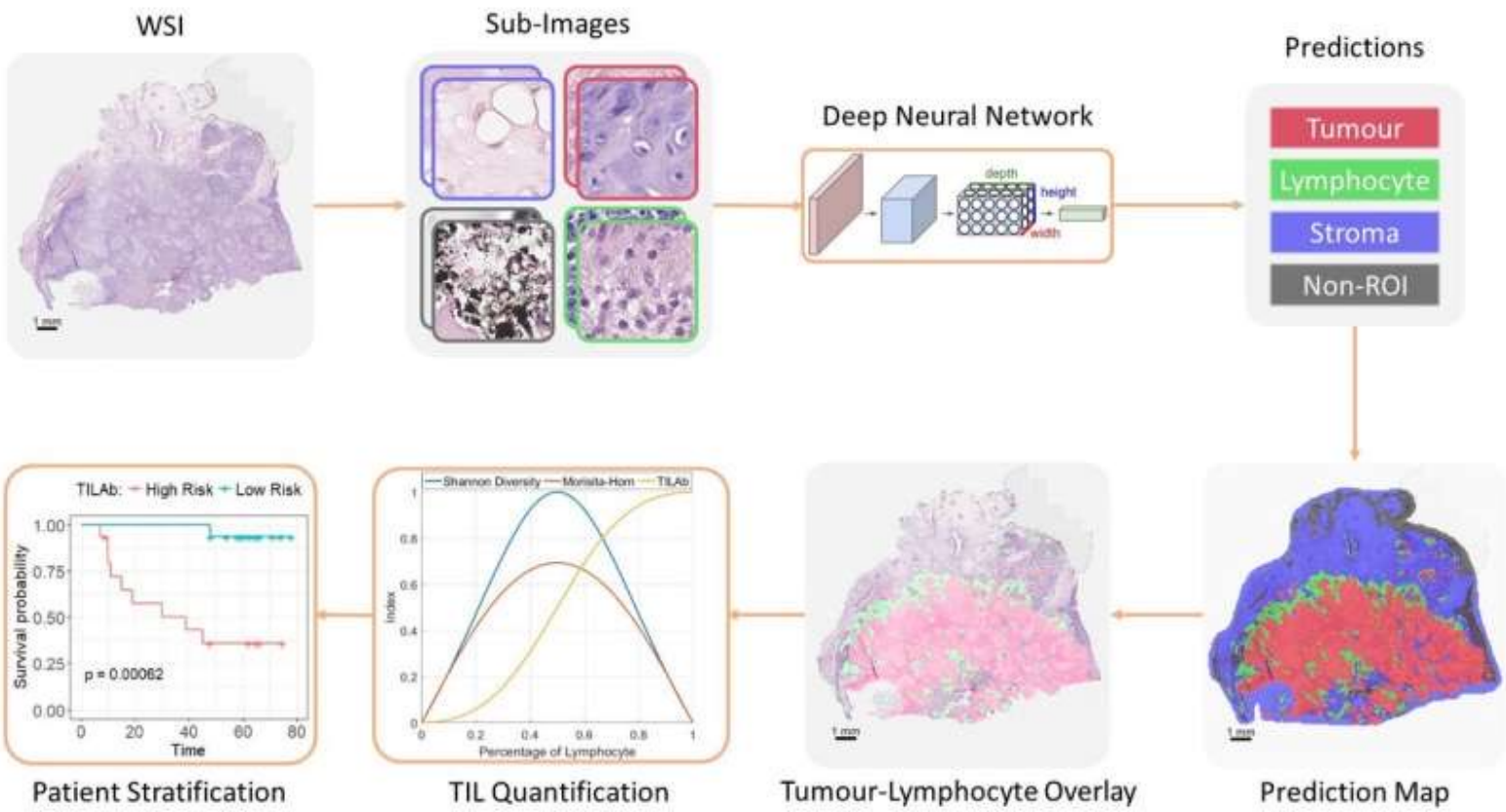
•Volume 124, pages 1934–1940, (2021)

Deep Learning in Head and Neck Tumor Multiomics Diagnosis and Analysis





AI can predict the chances of surviving oral cancer



Scientific Reports **volume 9**, Article number: 13341 (2019)