gutflix
GI learning, personalised

Summary

AI for imaging in pancreatic diseases

Adrian Săftoiu

UEG Week Berlin 2025 | Presentation

Hepatobiliary | Radiology & Imaging | Surgery

October 6, 2025

The speaker presented applications of artificial intelligence in pancreatic imaging and diagnosis, including real-time endoscopic ultrasound segmentation systems, pathology analysis tools, and emerging large language model applications.

KEY POINTS

- The speaker's team developed a real-time endoscopic ultrasound imaging software that segments the pancreas, cysts, and tumours without lag, validated on 300 patients at Orlando Health with accuracy similar to expert-performed ultrasound as stated by the speaker.
- A risk prediction model called presap, developed at MIT with companies including Boeing using over 1.5 million controls and 35,000 pancreatic ductal adenocarcinoma cases, increases the screening population for high-risk pancreatic cancer compared to current guidelines according to the speaker.
- AI systems for pathology can segment fine-needle aspiration biopsy samples with predictions that the speaker stated almost perfectly match pathologist annotations, tested on 60 patients in published work, and can be applied with digital confocal laser microscopy for real-time results.
- Ultrasound manufacturers including Olympus and Canon are incorporating AI techniques for image optimization, and some systems already provide automatic measurements when images are frozen as noted by the speaker.
- The speaker stated that ChatGPT tested on contrast-enhanced movies achieved only 50 percent diagnostic accuracy and warned that large language models still hallucinate, though other specialized medical software options may perform better.
- In the speaker's view, federated learning across multiple centers will be needed for standardization, and current AI models can learn with 50 to 100 patients instead of 500, with future need for system-independent models.

VIEW THIS CONTENT ON GUTFLIX

https://gutflix.eu/search/d/c1754dee-a82e-11f0-9c2d-0242ac140006

AI-generated summary

This summary was generated by an AI large language model based on the content transcript. It is for informational purposes only and should not be considered a substitute for clinical judgment. Always rely on your professional expertise and the full clinical context when making clinical decisions.