

**Name of Journal:** *Artificial Intelligence in Cancer*

**Manuscript NO:** 56778

**Manuscript Type:** MINIREVIEWS

**Application of artificial intelligence in clinical non-small cell lung cancer**

Liu Y. Application of AI in clinical NSCLC

Yong Liu

### Abstract

Lung cancer is the most common cause of cancer death in the world. Early diagnosis, screening and precise individualized treatment can significantly reduce the death rate of lung cancer. Artificial intelligence (AI) has been shown

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Artificial intelligence aids in diagnosis The AI diagnosis system used in the study was supported and maintained by Diannei Technology Co. Ltd (Shanghai, China). The core **diagnosis** component of the AI system was 3D DenseSharp Network, 6 a state-of-the-art multitask learning deep neural network based on 3D DenseNets, 7 with classification and segmentation heads for diagnosing and segmenting **lung nodules**.

Author: Xin Li, Bin Hu, Hui Li, Bin You Publish Year: 2019

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Clinical Applications of Artificial Intelligence in Lung Cancer Screening on Detection of Incidental Pulmonary Nodules. Imaging analysis shows promise in predicting the risk of developing **lung cancer** on initial detection of an **incidental lung nodule** and in distinguishing indolent from aggressive **lung neoplasms**.

Cited by: 84 Author: Wenya Linda Bi, Ahmed Hosny, Matthew...

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## Artificial Intelligence in Lung Cancer: Opening New ...

<https://www.lungcancernews.org/2020/04/16/> ... ▼

Apr 16, 2020 · Artificial intelligence (AI) approaches have emerged as promising tools to address important unmet needs across different specialties in medicine, including oncology, radiology, and **pathology**. Recent studies have described the **utility of AI in lung cancer** to improve detection, diagnosis, and prognostication.

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Artificial Intelligence in Cancer Imaging: Clinical ...

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In particular, artificial intelligence (AI) promises to make great strides in the qualitative interpretation of cancer imaging by expert clinicians, including volumetric delineation of tumors over time, extrapolation of the tumor genotype and biological course from its radiographic phenotype, prediction of clinical outcome, and assessment of the impact of disease and treatment on adjacent organs.

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Role of artificial intelligence in the care of patients ...

<https://www.ncbi.nlm.nih.gov/pubmed/29405289>

Combining **artificial intelligence approaches into health care** may serve as a beneficial tool for patients with NSCLC, and this review outlines these benefits and current shortcomings throughout the **continuum of care**.