Lung Cancer Detection using CNN

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Abstract: *The conversation about setting up a program for lung cancer screening was initiated with the publication of the results of the National Lung Screening Trial, which revealed lower mortality in high-risk participants undertaking CT screening. However, critical questions about the benefit-harm balance and the parameters of a screening programme, and its cost-effectiveness remain unresolved. A team of professionals in chest imaging, respiratory medicine, epidemiology, and thoracic surgery from all Swiss university hospitals prepared this joint statement following many sessions. The panel argues that premature and uncontrolled deployment of a lung cancer screening programme may cause severe harm that may stay unnoticed without thorough quality This position paper examines how to initiate such a programme with the purpose of coordinating activities across specialisations and institutions involved while also establishing quality standards. It discusses current evidence that lung cancer screening can help people live longer lives, as well as what might happen in Switzerland if such a programme were established. There are also recommendations for CT technology for evaluating lung nodules, as well as criteria for lung cancer screening facilities. Important topics covered include patient management, registry development, and funding. Before considering population-wide screening, the panel recommends that lung cancer screening in Switzerland be limited to a nationwide observational study. This is because there are various critical issues that must be addressed first.*

Keywords: CNN, Machine Learning, pre-processing, Classification autonomous deep learning, detection.

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