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Lungcheck: Multiplex point-of-care device for lung disease biomarkers in sputum

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"LungCheck project is focused on the development of an in-vitro POC bioanalytical device" Respiratory diseases place a huge burden on society in terms of disability and premature mortality. This could be mitigated by the deployment of analytical tools that aid in the early diagnosis of such diseases. In this context, the investment in point-of-care devices (POC) is highly demanded.

LungCheck project is focused on the development of an in-vitro POC bioanalytical device based on sputum sampling and rapid multiplex biomarker analysis, for the early diagnosis of chronic obstructive pulmonary disease and lung cancer in high-risk patients. The combined detection of several target biomarkers such as MPO, IL-8, TNF- and CD8+/FAS-L+ exosomes will help to unambiguously detect microbial infection and to differentiate it from other causes of inflammation as well as to detect the very early stage of lung cancer when it is still curable.

