



## Automated lung sound analysis using the LungPass platform: a sensitive and specific tool for identifying lower respiratory tract involvement in COVID-19

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This version is distributed under the terms of the Creative Commons Attribution Non-Commercial Licence 4.0. For commercial reproduction rights and permissions contact permissions@ersnet.org Received: 7 July 2021 Accepted: 5 Sept 2021	Lower respiratory tract (LRT) involvement, observed in about 20% of patients suffering from coronavirus disease 2019 (COVID-19), is associated with a more severe clinical course, adverse outcomes and long-term sequelae [1, 2]. By pointing out people at risk of deterioration, early identification of LRT involvement could facilitate targeted and timely administration of treatments that could alter short- and long-term disease outcomes [3]. While imaging represents the gold standard diagnostic test for LRT involvement, it is associated with a potentially avoidable radiation burden and may not be easily accessible in some treatment settings, such as primary care [4]. Alternatively, oxygen desaturation appears to be a specific, but not sensitive marker, since ground glass changes or consolidation are often observed in the absence of hypoxia [5–7]. The sensitivity of chest auscultation in identifying LRT involvement has been evaluated in limited populations and varies [8, 9], possibly to some extent due to variable skill among the assessors.