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LETTER TO THE EDITOR



Diagnostic accuracy of CT for COVID-19 Re: Diagnostic accuracy of screening tests for patients suspected of COVID-19, a retrospective cohort study

Dear Editor,

We appreciate the excellent retrospective cohort study by Moretti et al. on the diagnostic accuracy of screening tests for patients suspected of COVID-19 [1]. The authors cite the first version of a 'Living' Cochrane Systematic Review on the diagnostic accuracy of imaging tests for COVID-19, published in September 2020. This study found that chest CT had a specificity of 18.1% (95% confidence interval [95% CI] 3.71–55.8) and sensitivity of 86.2% (95% CI 71.9–93.8) [2]. In reference to this finding, Moretti et al. stated that chest CT seems to have a low specificity for COVID-19 infection [1].

The 'Living' Cochrane Systematic Review aims to evaluate the rapidly emerging evidence in this essential area of research with updated versions released as needed. The second and third versions of this review were published in November 2020 and March 2021, respectively [3,4]. Findings from the most recent update show a significant rise in the specificity of chest CT and a slight rise in sensitivity compared to the earlier versions; see Figure 1. Pooled estimates from 41 studies and 16,133 participants found that chest CT had a specificity of 80.0% (95% CI 74.9–84.3) and sensitivity of 87.9% (95% CI 84.6–90.6) [4].

There are several factors which may explain the significant rise of specificity in the latest version. The most recent pool of studies may include higher quality primary research due to the increasing body of knowledge surrounding COVID-19. Furthermore, the implementation of formal scoring systems such as the COVID-19 Reporting and Data System (CO-RADS), which clearly define positive findings of imaging tests, may have been less prevalent in studies included in earlier review versions [4].

We hope readers will look forward to the latest version of this ongoing living systematic review; the fourth



Figure 1. Pooled sensitivity and specificity estimates and 95% confidence intervals for chest computed tomography (CT) across review versions 1, 2 and 3.

version is 'In Press'. As the body of relevant research continues to expand, the team conducting this Cochrane review will continue to provide cutting edge evidence to drive clinical decision making.

Disclosure statement

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