Identification of coronavirus particles by electron microscopy requires demonstration of specific ultrastructural features

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Shareable abstract (@ERSpublications)
Unequivocal detection of ultrastructural features specific to organelles or viruses is required to infer their presence by electron microscopy. This article also provides reference images for the correct identification of coronavirus. https://bit.ly/3IFYDjc

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To the Editor:

With interest we read the publication of Evangelou *et al*. [1], which studied SARS-CoV-2 induced senescence in severe COVID-19. Immunohistochemistry (IHC) and electron microscopy (EM) were used for *in situ* detection of SARS-CoV-2 in autopsy tissues. The authors used formalin-fixed and paraffin-embedded (FFPE) autopsy lung of COVID-19 and non-COVID-19 patients to perform re-embedding for EM and ultrastructural analysis. They report detection of SARS-CoV-2 virions within alveolar type 2 cells of representative COVID-19 cases (figure 1c in Evangelou *et al.* [1]). Three electron micrographs show putative virus particles, indicated by arrows, to document their findings.