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Electrical impedance tomography for chest imaging in acute respiratory failure

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From the authors:

We read with interest the letter from Frerichs and Zhao regarding our recently published European Respiratory Society (ERS) statement [1]. Frerichs and Zhao noted that, although in the task force electrical impedance tomography (EIT) was considered among the imaging techniques used in acute respiratory failure, no related articles were reported in the final paper. In the report, task force members supported by two methodologists performed a systematic search of the literature on five lung imaging techniques (*i.e.* chest radiography, lung ultrasound, computed tomography, position emission tomography and EIT) using the same search terms for all the techniques (refer to tables S1–S4 in the ERS statement); according to these criteria we did not report any articles related to the EIT. This is due to the fact that the systematic literature search did not yield results inherent to the application of EIT in acute respiratory failure. In their correspondence, Frerichs and Zhao cited some studies and reviews on EIT. We are aware of the recent systematic review by Kobylianskii *et al.* [2] and the recommendations by Frerichs *et al.* [3] on EIT. Yet, the latter were excluded by the *a priori* choice of including only original investigations. Therefore, in our search, although many articles were found, these were excluded as they did not fulfil all the predefined criteria (*e.g.* papers on healthy subjects, case series, reviews and papers not focused on acute respiratory failure were excluded).