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Needle Gauge and Grey Zone Analysis in Endobronchial Ultrasound-Transbronchial Needle Aspiration: The Need for More Randomised Evidence

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Dear Editor,

The guideline paper by van der Heijden et al. [1] is very welcome as it unifies standards for conventional transbronchial needle aspiration (TBNA) and endobronchial ultrasound (EBUS)-TBNA sample preparation. We agree that the sedation level does not alter performance and we have also demonstrated that a light conscious sedation (albeit in a non-comparative study) achieved the expected results (including staging of EBUS-TBNA) comparable to those attained with deeper sedation and general anaesthesia [2]. Regarding the molecular profiling of the epidermal growth factor receptor (and other growth factors), we concur that EBUS-TBNA samples are satisfactory for molecular testing irrespective of needle gauge, as confirmed in our study [3].

We do have one reservation, however. Regarding needle gauge and diagnostic yield, we feel that there is a need for a larger randomised controlled trial to clarify whether there is a superiority of 21G given the conflicting reports of the existing non-randomised studies listed and the only small randomised controlled trial containing 30 patients in each arm. In this regard, we have recently reported a superiority for 21G in the subcharacterisation and typing of malignancy or benign disease [4] (albeit in another non-randomised study with 303 patients), especially where the diagnostic yield with the 22G needle was not substandard (both well above 90%), but the difference was seen in the subcharacterisation of malignancy. Therefore, we feel that this is an important metric worthy of a larger randomised study.

Finally, we have also questioned the utility of EBUS grey zone textural analysis proposed in a recent study [5] to add weight to the EBUS-TBNA, especially when the pathology is equivocal. In our recent observational study [6], we found this technique less useful and we feel that a larger randomised trial is again needed. Perhaps this issue could be addressed in future guidelines after these studies will have been completed to give further clarity in this area.

Financial Disclosure and Conflicts of Interest
The author has no conflicts of interest to declare.

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