



# Re: Technical issues in ultrasound-guided ethanol ablation for thyroid lesions

## ULTRASONOGRAPHY

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### LETTER

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We greatly appreciate your detailed and constructive comments. In our study, we defined a "low dose" as less than 5 mL [1]. However, we did not propose a precise amount of ethanol according to the nodule volume or the cystic nature of the thyroid nodule. This might be a limitation of our retrospective study. Further research is necessary. Although the exact dosage of ethanol has not been established yet, the concept of single-session low-dose ethanol ablation (EA) might be important in terms of the basic principle for drug injection, which is to obtain the maximum effect with the minimum amount. Using a small amount of ethanol has the advantages of being easy to handle during the procedure and minimizing the risk of procedure-related complications, including ethanol leakage and patient discomfort.

As you pointed out, Park et al. [2] reported a higher therapeutic success rate in a retention group than in an aspiration group, especially in predominantly cystic nodules. However, the efficacy did not show statistical significance in either the volume reduction rate ( $P=0.761$ ) or therapeutic success ( $P=0.070$ ) [2]. In addition, Baek et al. [3] reported high effectiveness despite using an aspiration method after 2 minutes of ethanol retention, and Kim et al. [4] reported that the two techniques (retention only and aspiration after injection) showed similar therapeutic success rates (96.7% vs. 93.3%). Whether there is a statistically significant difference between the two techniques in predominantly cystic nodules also requires further investigation.

We agree that our study includes cases with short-term follow-up, making it necessary to conduct a subsequent study with long-term results. Including your opinions on technical issues, we hope that these discussions and our study could provide basic data for future studies and the standardization of EA procedures.

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### Conflict of Interest

No potential conflict of interest relevant to this article was reported.

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