

## Reply to Chandrasekhara and Aggarwal



First and foremost, we express heartfelt appreciation to Aggarwal M et al for their comments related to the systematic review and meta-analysis evaluating the role of radiofrequency ablation (RFA) for management of malignant biliary obstruction (MBO). The insights provided by the authors deserve to be clarified. It is clear that the authors performed a detailed evaluation of the systematic review and meta-analysis [1], demonstrating the importance of this topic.

As reported in this systematic review and meta-analysis [1], there is a lack of robust evidence available in the literature. The aim of the study was to improve the quality of evidence of the limited available data, as underscored in the article. This publication may encourage more elaborate trials to enhance the quality of evidence.

Even though our meta-analysis included only randomized controlled trials (RCTs) (evidence 1A), it is not exempt from limitations, as reported in the discussion section of the study.

The high heterogeneity of the meta-analysis is the main limiting factor. This is related to several factors, such as small sample size of the published RCTs, different disease stages, stent types, and biliary access routes. In addition, there is a lack of information regarding the length and etiology of MBO. In an attempt to reduce the heterogeneity of the results, previous meta-analyses [2,3,4,5,6] included non-RCTs to increase the sample size. However, that measure does not increase the quality of evidence and should be evaluated with caution.

Unfortunately, the RCT recently published by Jarosova J et al [7] was not available at the time of the submission of our study, and thus, could not be included. In an attempt to provide more quality data, multiple subanalyses were performed, including stent types, treatment regimens, MBO etiologies, and stricture locations. The decision to include different biliary access routes (percutaneous and

endoscopic) was based on the fact that the main outcomes of RFA (stent patency and overall survival) are not altered by the route, except for the rate of adverse events.

It is critical to clarify all raised concerns about the data included in the meta-analysis [1]. The concerns about data collection from the manuscript published by Albers D et al [8] is reasonable. The data included in the meta-analysis [1] were collected from the results provided in the text of the manuscript and not from the figures [8]. Therefore, despite the valuable points raised in the letter to review, it is important to state that the results of the systematic review and meta-analysis can be trusted.

Once again, we thank the authors for the valuable comments. We hope this discussion encourages more quality studies to better understand the role of RFA for MBO.

### Conflict of Interest

Dr. Diogo Turiani Hourneaux De Moura: BariaTek Medical - Advisory Board Member (Consulting fees). This was not relevant to this study. Dr. Eduardo Guimaraes Hourneaux De Moura: Olympus - Consultant (Consulting fees) and Boston Scientific - Consultant (Consulting fees). These were not relevant to this study. The other authors declare no conflicts of interest.

### The authors

**Matheus de Oliveira Veras<sup>1</sup>, Diogo Turiani Hourneaux de Moura<sup>1</sup>, Eduardo Guimarães Hourneaux de Moura<sup>1</sup>**

<sup>1</sup> Gastrointestinal Endoscopy Unit, University of São Paulo Hospital of Clinics, São Paulo, Brazil

### Corresponding author

**Dr. Matheus de Oliveira Veras**

University of São Paulo Hospital of Clinics, Gastrointestinal Endoscopy Unit, Av. Dr. Enéas Carvalho de Aguiar 255, 05403-000 São Paulo, Brazil  
matheusveras@icloud.com

### Publication note

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Georg Thieme Verlag KG, Rüdigerstraße 14,  
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