

## Getting the full picture: let's always include sustainability in trials reporting new technology!



To the Editor:

We read with interest the report by Luo et al<sup>1</sup> of their noninferiority trial concluding that disposable gastroscopes are a viable alternative to their reusable counterparts for “routine examination, bedside first aid, and some certain circumstances.”

Although we think that the recent increase in interest in the efficiency of disposable endoscopes is exciting, we are concerned about the apparent lack of attention given to sustainability and the environmental implications.<sup>2</sup> Single-use endoscopes challenge the principle of reusing—1 of the 3 pillars of environmental sustainability (reduce, reuse, recycle)—and have given rise to constructive debate. Demonstrating performance similar to that of reusable endoscopes is definitely an achievement, but focusing on “technical” outcomes cannot answer the bigger question posed when we consider the paradigm shift of proposing single-use endoscopes for routine procedures. Available data are concerning and suggest that a transition to single-use duodenoscopes alone would increase CO<sub>2</sub> emissions 20 times<sup>3</sup> and the net waste mass by 40%.<sup>4</sup>

There is a clear distinction between endoscope contamination and clinically relevant infection, given that most endoscope contaminations do not translate into clinical implications for patients. Human error seems to be the most common cause behind inadequate endoscope reprocessing and can be addressed by training programs and standardized education.<sup>5</sup> Whereas patient safety is paramount, the principle of achieving an “as low as reasonably practicable” infection risk is now considered by several scientific societies and healthcare institutions to balance clinical, societal, financial, and environmental costs.<sup>6</sup> To advance the discussion of this topic, studies of novel single-use endoscopes should disclose more about the materials used for production, life-cycle assessment, and plans for recycling components. Only by considering these factors in their trial design can future noninferiority trials account for all aspects of this difficult and societally relevant issue.

### DISCLOSURE

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## Vigilance for barotrauma with the use of topical mineral powder hemostasis



To the Editor:

We enjoyed reading the recent article by Sung et al,<sup>1</sup> “Use of topical mineral powder as monotherapy for treatment of active peptic ulcer bleeding.” The authors noted 2 perforations that were not attributed to the use of topical mineralized powder (TMP) therapies. However, based on the literature and on our own experience, barotrauma is a