

A Misleading Meta-analysis of Seprafilm

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I am writing to express my dissenting view and concerns regarding the validity of a recent meta-analysis published in the *Journal* by Zeng et al [1] regarding the safety and effectiveness of Seprafilm.

When performing a systematic review and meta-analysis, obviously the net has to be cast wide to ensure that relevant information is being considered. However, in this case the authors cast the net so wide that they included a different fish. G-HA/CMC is not Seprafilm [2]. It is a different product, with a different chemical composition, and different physical characteristics, and the data are not applicable to Seprafilm.

Prompted by this concern, we undertook a reanalysis excluding the data from the trial with G-HA/CMC, using the same methodology as used in the published meta-analysis. This reanalysis led to different results. Additionally, we were unable to reproduce the numbers in two of the analyses in the Forest plot. These discrepancies did not seem to be explained by the exclusion of the erroneously included trial information, and the remaining explanation is that the authors performed a miscalculation when gathering data.

It is even more concerning that the authors are drawing conclusions regarding the effectiveness of Seprafilm to reduce small-bowel obstruction based on adverse event reporting. This not only violates fundamental scientific principles of data collection but also compares apples and

oranges. In fact, the effectiveness of Seprafilm to reduce adhesive small-bowel obstruction has been prospectively studied, using predefined criteria for this end point, and the outcome of that study contradicts the conclusions drawn by the authors. Although the study is referenced, and the results therefore are known to the authors, they fail to discuss this fact.

A more careful review of the underlying studies would have noted that one of the findings was that complication risk could be eliminated by not wrapping the anastomosis with Seprafilm [3]. This application guideline has been translated into clinical practice for a long time and is incorporated in instructions for use worldwide. If the authors had considered the appropriate use of Seprafilm in their analysis, the outcome and conclusion would have been different.

Meta-analyses are powerful tools in arriving at a conclusion about a body of information and can be very helpful to the medical community. However, the research has to be performed thoughtfully and diligently, incorporating the correct information, and the data need to be discussed in a meaningful medical context. In this case, the failure to do so has led to conclusions that are erroneous and misleading.

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