1. **If AI is used as an adjunct to writing a paper, but the work in the article is original, should it really matter? And yes, I realize that AI might sound formulaic, but if you read enough letters to the editor, they often follow a similar pattern, which is probably why the AI-generated letters are the same.**

   Not inherently. The scientific contribution lies in the originality of the hypothesis, methodology, analysis, interpretation, and conclusions. Whether a language model helped improve grammar or readability shouldn't really matter.

   However, as we mentioned during the webinar, the key issue is accountability. Every statement in a manuscript remains the responsibility of the human authors. AI can help communicate science more clearly, but cannot assume responsibility for scientific accuracy.

   Hence, the concern is not whether AI was used. It is whether the authors remain intellectually engaged in the work and can stand behind every sentence. AI is a tool. That is why we recommend transparent disclosure.

2. **What is your stance on using AI to even search for articles that are in publication before starting your own manuscript?**

   We view this similarly to using PubMed or another search engine. It can be an efficient starting point.

   However, AI-generated literature summaries should never replace a comprehensive literature review. Large language models may miss important studies, overemphasize others, or even fabricate citations.

   AI is useful for orientation. The final literature review should always rely on verified primary sources such as PubMed, Scopus, Web of Science etc.

3. **Can you please comment on the use of AI for generating code for statistical analysis and graft generation in Python or RStudio, where the code is edited and generated by an LLM?**

   This is an area where AI can substantially improve efficiency. If an investigator uses AI to generate code, then carefully reviews, edits, validates, and tests that code, we see little difference from adapting code found online or from published repositories.

The important point is verification, accuracy and reproducibility.

Researchers remain responsible for ensuring that the code performs exactly as intended and that the analyses are statistically sound. AI can thus accelerate coding, but it cannot replace statistical judgment.

4. **Where do we get these tools to check if the writing has been done with AI?**

   We work closely with our publishers and use a combination of commercial and proprietary screening tools such as Turnitin AI detection, GPTZero etc. However, most major scientific journals do not base editorial decisions solely on AI-detection software. Instead, editors and editorial boards focus on scientific quality, internal consistency, methodological rigor, and whether authors can support the work they submitted.

5. **Do you use AI when correcting/editing a manuscript?**

   Yes, but in a very limited and transparent way. We may use AI to improve clarity, summarize complex information, organize ideas, or identify areas that might need additional explanation.

   However, we do not use AI to make editorial decisions, interpret scientific findings, or determine acceptance or rejection. Those all remain fundamentally human responsibilities.

6. **How should journals evaluate studies in which AI itself is the intervention, such as surgical decision-support systems or AI-assisted operative planning, given the rapid evolution of these technologies?**

   The studies are held to the same standards as any clinical intervention. Authors should clearly describe:
   - The AI model
   - The training data
   - External validation
   - Performance metrics
   - Potential bias
   - Human oversight
   - Reproducibility

- Clinical implementation

Since AI systems evolve rapidly, transparency becomes even more important, especially which version of the AI tool was used. Ultimately journals will evaluate whether the study advances patient care, not simply whether the study uses AI.

7. **How do you find out that the authors have been using AI without disclosing it? Do you have any special programs you use when checking the manuscript's content?**

   Answered above. Editors and editorial boards have several decades worth of experience reviewing manuscript. Editors become concerned when manuscripts contain fabricated references, internally inconsistent statements, or unsupported conclusions. Those issues warrant further discussion with the authors regardless of whether AI was involved.

   The focus is on scientific integrity and academic honesty rather than policing technology.

8. **Is it possible that you have false positives when you suspect that AI was used when, in fact, it wasn't? Do you verify that with the authors before rejecting the article?**

   Yes – false positives can occur. Current detection tools are imperfect. Because of that, we do not accuse authors based solely on AI-detection score or software. Whenever concerns arise, we directly contact authors for further clarification. Authors are given the opportunity to explain their writing process or further elaboration on specific portions of the manuscript.

   Scientific publishing depends on fairness and due process.

9. **For some of us who are new to AI, if trainees are writing and using AI, how do we recognize the patterns? Are there ways to check that?**

   Rather than trying to become AI detectives, we think educators should focus on whether trainees understand the work that they submit. Good mentoring includes asking questions such as:
   - Can you explain your reasoning?

- Why did you choose this analysis?
- What are the limitations?
- How would you defend these conclusions?

If a trainee or mentee cannot explain their work, AI is not the primary problem. The educational goal is to develop and refine scientific thinking. The manuscript is the output, and not the sole focus.

10. **As a content expert reviewing SR & MA, would you be okay with AI being used for selecting the relevant papers?**

    As discussed during the webinar, potentially yes. AI may improve efficiency during title and abstract screening. However, authors should validate the AI-assisted screening process, document exactly how AI was used, and ensure that humans review uncertain cases. Transparency and reproducibility are essential components of the scientific process. AI thus can help augment systematic review methodology, but should never replace rigorous review.

11. **What's your take on papers involving the development of AI models and, down the line, using them to optimize the outcomes?**

    These can be increasingly important contributions to surgical science. However, novelty alone is insufficient. Any AI model should demonstrate clinical relevance, external validation, calibration, fairness across populations, interpretability, and meaningful improvement over existing approaches.

    The most valuable AI models solve clinically important problems. Technical performance is not the sole assessment.

12. **Is it okay to pre-review the manuscript with an AI like a JACS reviewer before submission? If yes, do these need declarations too?**

    This can be a productive use of AI. Many investigators already ask AI to identify unclear writing, suggest missing references, improve organization, or critique readability. You can view this as analogous to obtaining feedback from a colleague before submission.

    Our important message is that AI can assist scientific work, but it cannot assume scientific responsibility. It has become an important component of the surgical

researcher’s armamentarium and the overall issue is not if it was used but how it was used, with the transparent documenting of such.

As we advised during the webinar, err on disclosure of any AI use to improve the transparency. The guiding principle is transparency rather than policing or prohibition.