Peer Review File
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Review comments

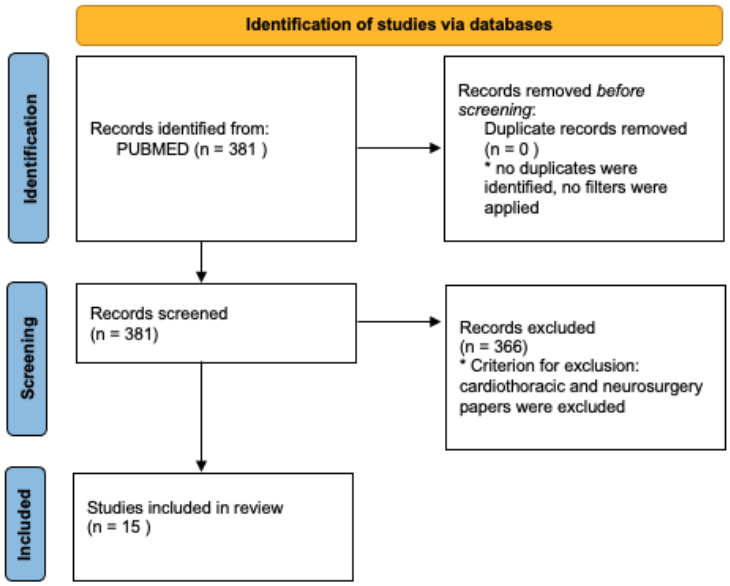
The authors have presented a literature review on robotic approaches for endovascular procedures and vascular reconstruction. The authors aim to evaluate the advances and current uses of robotic-assisted procedures in vascular surgery. Although the topic is appealing, there are several major concerns that the authors should address thoroughly before resubmitting this work.

One concern is that the literature search methodology is not convincing. A systematic literature analysis using the PRISMA method is recommended. Using the PRISMA flow diagram, how the systematic review was conducted and how the published studies were included in this review would be much clearer. Moreover, the exclusion criteria should be explained in detail. For example, the authors stated that they exclude studies on cardiac surgery and intracranial surgery without providing the reason.

Reply: We thank reviewer A for this very useful feedback. Although this is not a formal systematic literature review, we will address this concern. We have included a PRISMA flow diagram in the attached figures (Table 3 – PRISMA flow diagram). The newly created figure is also included at the conclusion of this specific response for ease of review.

Furthermore, we exclude studies regarding cardiac and intracranial surgery since this is the purview of different specialists (specifically, cardiothoracic surgery and neurosurgery). Vascular surgeons are not strictly involved in these areas. We have included this clause within the Abstract as well (Page 2, Lines 1-4)

Table 3 – PRISMA flow diagram



One concern is about the focus point of this review. I expected more details on which robotic approach is used and how it has behaved. The authors only describe the studies in a quite general way without a deep analysis of the robotic approaches and technologies.

Reply: We thank reviewer A for this feedback. The goal of this study was to provide a broad strokes review on robotic vascular surgery and therefore did not include very detailed analysis on this new technology. Furthermore, little is known about the efficacy of these technologies. We have clarified this as to not confuse the reader on Page 2, Lines 33-35.

Another concern is the lack of a table or figure summarizing the involved studies. The authors should summarize all the involved studies with respect to some factors but not limited to: which robotic approach or system is used? Which performance metrics did it use to evaluate the robotic approach? How is it behaving according to the aforementioned performance metrics? Which scenario/application did the studies apply to?

Reply: We thank reviewer A for this feedback. Our goal was **not** a formalized systematic review (did not undergo 2-person review, use of COVIDENCE or other SLR programs) and, instead, our goal was to provide a thorough chapter review for a vascular surgeon/resident to learn from. We therefore did not create a table / figure summarizing all involved studies since this is not a formal SLR.

Some minor suggestions on writing.
Rename the subsection title "Conclusion for Part I" since the authors did not specify which section is Part I.

Reply: We thank reviewer A for this feedback. We changed the subsections of this narrative review so as to make it more clear for the readers. We have dedicated ‘Part I’ to discuss open procedures and ‘Part II’ to focus on endovascular ones. We then follow with a subsection focused on the barriers to the incorporation of robot technology. Our final subsection is dedicated to our broad conclusions.

The authors need to provide references to support their statement. For example, the authors need to give a reference for "Perhaps no field throughout all of surgery has had such a drastic change in landscape over the last 100 years, as vascular surgery has had due to the introduction of endovascular techniques.".

Reply: We thank reviewer A for this feedback. This narrative review has undergone major revisions, and we have included necessary references.