Dear Editor,

I read with interest your review: “*Ushering in the next generation of autonomous surgical robots? current trends and future possibilities with data driven physics simulation and domain randomization*”.

Artificial intelligence is the future of the automatization of many medical procedures and for this reason I think that the topic of this review is of great interest.

However, I have some doubts regarding the methodology. Here my comments.

**Major comments**

In general, the text is not so easy to follow due to several abbreviations, lack of explicative figures and tables. Moreover, there is not so much evidence of the clinical implications of a robotic automized surgery in the field of Urology. The Authors should make it more accessible to the clinicians adding also the experience of this technology in Urological Department.

The Authors presented more the technical aspects of artificial intelligence without give too much space to the clinic. This is a big limitation to the study and could limit the number of readers.

**Keywords:** I would include robotic surgery (i.e. robotic surgery)

**Methods**: How the literature research was conducted? Which search engines were used? My advice is to rewrite the review after a systematic research if literature using the main search engines such as Medline, Pubmed, Cochrane library, in order to not miss all the more contemporary and important literature on this topic.

**Minor comments**

Please add the line number in order to make easier the corrections

Please add tables and figures which describe the different kind of AI and their application settings.

There are several layout problems. For example, in the Introduction “ML is a subset of AI” is in a different size relative to the rest of the text.

Sometimes, some words are underlined. Why? Please explain.