Reviewer's report

Title: Evaluation of the intraoperative specimens of the thoracic and abdominal aorta

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Reviewer: michael grimm

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The manuscript titled "Evaluation of intraoperative specimens of the thoracic and abdominal aorta" by Juraszek et al. reports on a large series of histological samples gained during aortic surgery. It is properly written and organized. The figures are illustrative and contributory.

The Introduction:
The section is brief and written in a general form. You have to provide literature data emphasizing the current knowledge, the association between histopathological findings and aortic pathology.

Materials and Methods:
Specimens from 151 patients were examined for the presence of medial degeneration, atherosclerosis, and aortitis. Usual histological stainings were performed of the tissue of aortic dissections and aortic aneurysms. The authors have also analyzed the basic clinical condition of their patients. The hemodynamic status of the patients in the various groups (presence of Hypertension, diabetes, dyslipidemia, family history, connective tissue disease) was indicated. This may have a certain importance in a pathology which is obviously multifactorial.

Thoracoabdominal aneurysms were excluded due to their multisegmentality. Why this is an exclusion criterion?

"Patients were stratified according to above and below 65 years of age” Please describe why you determined this threshold.

Statistics should be described after the ethical approval.

The work contains many figures which make it unnecessarily long.

Discussion:

The authors noted that high grade atherosclerosis was more common in patients older than 65 years of age who presented with aortic dissection, compared to younger patients. The authors conclude by their work "the need for accurate and early determination of patients being at risk for acute type A aortic dissection." This conclusion is important in the cardiothoracic context. In my opinion this manuscript has a scientific value for being published.

Level of interest: An article whose findings are important to those with closely
related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

Some of the authors have been former coworkers of me. But there is no interference (neither negative nor positive) with them affecting objective decision.