Conclusion: Major revision
Scientific Quality: Grade C (Good)
Language Quality: Grade B (Minor language polishing)

- methods should be fulle stated and described in a separate paragraph. - each section (coronary plaque detection, vulnerable plaque identification, coronary stenosis assessment) should be accompained by a table summarizing the results of the literature, discussing results and pros & cons for each technique. - a take-home message should be presented in a figure. - in perspectives, bullet points should be replaced with a more fluent discussion. - in conclusion, authors state that they "have systematically surveyed". This is not true as this is not a systematic review. Systematic review should follow PRISMA guidelines. Authors have to decide wheter revising this article into a systematic review or a conventional review. methods and conclusions should be revised accordingly.

[Response] In the revised manuscript, we have provided a figure (Fig. 1) covering the main topics of this survey. We have also summarized different machine learning methods used in each topic of CAD diagnosis in Table 1. The word systematically has been removed.

Conclusion: Accept (High priority)
Scientific Quality: Grade B (Very good)
Language Quality: Grade B (Minor language polishing)

Zhao et al summarized currently existed machine learning algorithms in analyzing coronary CT angiography images and diagnose coronary artery disease. The authors focused on the three main concerns of assessment coronary atherosclerosis and CAD, namely extracting coronary artery (anatomy), plaque features, and stenosis (anatomic or hemodynamic significance). As an interventional cardiologist, I'm very impressed about how much machine learning is potentially able to do to provide somewhat automated analysis of CTA data. This review is more focused on technique aspects of the machine learning field. The manuscript is well written, and reads well. I consider it could be good contribution to the literature. In author contributions: ..... "Fan S performed data accusation....", was "accusation" a typo? If the authors could provide a summary figure or table of the surveyed algorithms, it will illustrate the information better.

[Response] In the revised manuscript, we have deleted the word "accusation" and also checked other typos. We have provided a figure (Fig. 1) covering the main topics of this survey. We have also summarized different machine learning methods used in each topic of CAD diagnosis in Table 1.

Conclusion: Rejection
Scientific Quality: Grade D (Fair)
Language Quality: Grade C (A great deal of language polishing)

This is a mini-review written by Zhao et al, which aims at summarizing the usefulness of machine

learning algorithms for the diagnosis of coronary artery disease using coronary computed tomography angiography. I am not sure how this manuscript adds knowledge to the current literature. Table and Figures are completely absent. Minor points: Examination of cardiac CT is not only performed by radiologists. Use the word non-calcified rather than mixed plaque.

[Response] There are reviews that contributed to the segmentation of the coronary artery, detection of calcified plaques, and calculation of fractional flow reserve (FFR), respectively. To the best of our knowledge, this is the first paper to report a survey of the ML algorithms for the diagnosis of CAD in CTA images, including extraction of coronary arteries, detection coronary plaques, identification of vulnerability features, and assessment of coronary stenosis. As for the types of plaques, coronary plaques can be divided into calcified plaques (full calcification), soft plaques (no calcification), and mixed plaques (partial calcification) depending on the degree of calcification.