Confidential comments for Editor,

I have completed my review of the manuscript. The topic addressed in this manuscript is of scientific importance and has the potential to contribute valuable insights to the field, particularly regarding the role of necroptosis in inflammatory conditions such as pulpitis. However, the manuscript in its current form has several critical issues that need to be addressed before it can be considered for publication.

However, after careful evaluation, I recommended that the manuscript require substantial revisions (major changes) in the second round.

Basic reporting

- The manuscript requires improvement in grammatical accuracy and overall language quality.
- What about the hypothesis proposed in the study?
- The aim of the study is not uniform in both the abstract and introduction; try to solve it.

Study design

- The manuscript requires improvement in grammatical accuracy and overall language quality.
- What about the hypothesis proposed in the study?
- The aim of the study is not uniform in both the abstract and introduction; try to solve it.

Validity of the findings

- The findings were not clear in the study.
- The type of the study was missed.
- What's the novelty of the study?
- The abstract was not attractive and weak and needs to be repeated; it is nonstructural, so convert it into structural (background, aim of the study, methodology, results, conclusion). Also, the methodology of the result of the study was missing.

Additional comments

There are many comments about the manuscript:

- 1. Mechanisms of Necroptosis:
 - The manuscript doesn't clearly distinguish the cross-talk between apoptosis and necroptosis signaling.
 - The term "microsomes" is introduced without context, which might confuse non-expert readers.
- 2. Pro-inflammatory Mechanisms of Necroptosis:
 - The review mixes different pathways (TLR, TNFR1, and TRIF-RIPK3-MLKL) without clearly distinguishing between the extrinsic and intrinsic necroptosis triggers. Since the title focuses on the extrinsic pathway, a more focused discussion would strengthen the argument.
 - The review lacks clear subheadings, making it difficult to follow complex processes like necrosome assembly, ROS generation, and mitochondrial dysfunction.
- 3. Necroptosis in Pulpitis:
 - The review missed the real clinical trial data or case studies validating necroptosis-targeted therapies in human pulpitis treatment.
- 4. Conclusions:
 - It was repetitive, and the conclusion of the abstract was poor. Replace it.