Reviewer #1:

Scientific Quality: Grade B (Very good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: This manuscript (No: 64252) reviewed the role of stem cells –derived bioactive factors including secretome and EVs in fighting COVID-19. It possess guiding value for controlling pandemics and has a certain clinical application prospect. The writing is clear and logical. And it is also well organized. Minor concern:

- Grammatical mistakes. For example, in Abstract, "EVs supporting both anti-inflammatory and tolerogenic immune response by regulation in proliferation, polarization, activation, and migration of different immune cells." is not well understood. The authors edited and amended the mistakes. Thank you.
- 2. Expression error. In paragraph "Stem cell-based therapeutics", the sentence" Due to the dependency of COVID-19's severity on patients' immune system, restraining MSC's immunoregulatory characteristics to enhance cytokine storm is substantial in dealing with serious COVID-19 patients." seems not to be consistent with the main opinion that MSC's immunoregulatory characteristics of inhibiting cytokine storm benefits COVID-19 patients. So is the sentence "enhances the inflammatory response triggers the extracellular matrix remodeling and angiogenesis" in paragraph "MSC-derived EVs". The mistakes were corrected. Thank you.
- Other errors. The abbreviations should be consistent throughout the text. Such as "TGFβ", "TGFβ", "MSC EVs", "MSC-EVs", "miRNA", "microRNA", "mRNA", "messenger RNA", etc. All abbreviations were checked to be consistent. Thank you.