OPEN PEER REVIEW REPORT 2

Name of journal: Neural Regeneration Research
Manuscript NO: NRR-D-19-00500
Title: A Review of ABC Efflux Transporters in the Blood Spinal Cord Barriers
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COMMENTS TO AUTHORS
Blood spinal cord barrier is a unique barrier structure of the central nervous system and relatively independent physiological entity. Its function is mainly to limit and regulate the extramedullary molecules into the spinal cord to provide a stable microenvironment for the spinal nerve cells to function normally. Many spinal cord diseases are related to the destruction of the blood-spinal barrier. The destruction of the blood spinal cord barrier will seriously disturb the environmental homeostasis in the spinal cord, which is an essential cause of refractory after spinal cord injury. It is an important pathway and central link, in which subsequent damage mechanisms interact with each other. The author describes the effects of ABC efflux transporters on protecting the spinal cord from adverse effects of systemically targeted drugs and restricting centrally targeted drugs from entering the active site in the spinal cord. This review has some significance for us to understand the significance of the blood spinal cord barrier. However, some issues should be addressed by authors.
1. Please add a Figure to each section so that readers can more easily understand what you mean.
2. The subtitles and most of the length of the article are presented in the blood-central nervous barrier, and the title is used in "A Review of ABC Efflux Transporters in the Blood Spinal Cord Barriers" Is the title appropriate?
3. In the concluding remarks section, the depth of discussion is insufficient. Please deepen the discussion depth.
4. The language logic of this paper needs to be further strengthened, and the parts of the article are more closely linked.
5. Some references cited in the article are too old and should refer to some new articles to show the latest research results for readers.