

No concerns or questions were raised by the reviewers or editor. The following changes have been made to the manuscript and are highlighted within the document:

1. Title of manuscript has been changed to: **Aquaporin-4** and spinal cord injury
  
2. Section: SPINAL CORD INJURY
  - a. Added "**For further detail on animal models of SCI, see reviews by Rosenzweig et al. [5], Kwon et al. [13] and Cheriyan et al. [15].**"
  - b. Reference added: 4 Cregg JM, DePaul MA, Filous AR, Lang BT, Tran A, Silver J. Functional regeneration beyond the glial scar. *Exp Neurol* 2014; **253**: 197-207.[DOI: 10.1016/j.expneurol.2013.12.024. PMID: 24424280]
  - c. Reference added: 8 Scheff SW, Rabchevsky AG, Fugaccia I, Main JA, Lumppp JE, Jr. Experimental modeling of spinal cord injury: characterization of a force-defined injury device. *J Neurotrauma* 2003; **20**(2): 179-193.[DOI: 10.1089/08977150360547099. PMID: 12675971]
  - d. Reference Added: 11 Plemel JR, Duncan G, Chen KW, Shannon C, Park S, Sparling JS, Tetzlaff W. A graded forceps crush spinal cord injury model in mice. *J Neurotrauma* 2008; **25**(4): 350-370.[DOI: 10.1089/neu.2007.0426. PMID: 18373484]
  - e. Reference Added: 14 Stokes BT, Jakeman LB. Experimental modelling of human spinal cord injury: a model that crosses the species barrier and mimics the spectrum of human cytopathology. *Spinal Cord* 2002; **40**(3): 101-109.[DOI: 10.1038/sj.sc.3101254. PMID: 11859436]
  - f. Reference Added: 15 Cheriyan T, Ryan DJ, Weinreb JH, Cheriyan J, Paul JC, Lafage V, Kirsch T, Errico TJ. Spinal cord injury models: a review. *Spinal Cord* 2014; **52**(8): 588-595.[DOI: 10.1038/sc.2014.91. PMID: 24912546]
  
3. Section: SPINAL CORD EDEMA
  - a. Added: "Repair of the barrier is evident by 2 to 3 weeks post-trauma [3], **but disruption may last for longer periods of time depending on the severity of injury [24].**"
  
4. Section: AQP4 EXPRESSION FOLLOWING CONTUSION SCI
  - a. Added: "**The same research group then performed an extensive characterization of AQP4 expression following contusion injury in a rat model.**"
  - b. Added: "Lower levels of AQP4 appeared to be correlated with reduced motor recovery following severe injury in this contusion model of SCI,

which differs from the concept of the detrimental effects of AQP4 overexpression after injury <sup>[47]</sup>.”

- c. Added: “Peripheral nerve injury also leads to increased AQP4 within the spinal cord and decreased pain withdrawal thresholds <sup>[54]</sup>.”
- d. Reference added: 54 Oklinski MK, Choi HJ, Kwon TH. Peripheral nerve injury induces aquaporin-4 expression and astrocytic enlargement in spinal cord. *Neuroscience* 2015; **311**: 138-152.[DOI: 10.1016/j.neuroscience.2015.10.025. PMID: 26480815]