



AB093. SOH22ABS006. Evidence for the efficacy of tocilizumab in hospitalised patients with coronavirus disease 2019 (COVID-19): a structured review of the literature

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Background: This is a Structured Literature Review of randomised clinical trials (RCTs) that attempted to determine the efficacy of tocilizumab (TCZ) in the treatment of hospitalised patients with coronavirus disease 2019 (COVID-19).

Methods: The electronic databases PubMed, Scopus, Embase, and CINAHL Complete were searched. Studies reporting adult cases of confirmed [by polymerase chain reaction (PCR)] or clinically suspected COVID-19 were eligible for inclusion. Studies reporting TCZ treatment in hospitalised COVID-19 patients, studies adequately reporting outcomes and mortality data, and RCTs were included. Exclusion criteria included papers with incomplete reporting of data and irrelevant topics. Papers were appraised using the Cochrane Risk of Bias Critical Appraisal Tool (Cochrane, 2021).

Results: A total of 10 RCTs were included in this critical review. Heterogeneity existed between studies in disease severity, in the level of oxygen support, and in the numbers of patients mechanically ventilated (MV) at baseline. Heterogeneity in level of patient care also existed with some studies reporting admission to the Intensive Care Unit (ICU) at baseline whereas other studies reported hospital ward level care.

Conclusions: Based on current evidence it would appear that TCZ may be effective in preventing progression of illness in patients with moderate/severe COVID-19 disease. Treatment with TCZ may reduce hospital length of stay, prevent ICU admission, and consequentially may prevent progression to death in certain cohorts of patients with COVID-19. While promising, these results need further large scale, methodologically robust RCTs in order to prove definitive efficacy of TCZ.

Keywords: Coronavirus disease 2019 (COVID-19); interleukin-6 receptor antagonist (IL-6 receptor antagonist); structured review; tocilizumab (TCZ); treatment

Acknowledgments

Funding: None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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doi: 10.21037/map-22-ab093

Cite this abstract as: Kennedy L, Mallee P, Nix C. AB093. SOH22ABS006. Evidence for the efficacy of tocilizumab in hospitalised patients with coronavirus disease 2019 (COVID-19): a structured review of the literature. *Mesentery Peritoneum* 2022;6:AB093.