INPLASY

Efficacy and safety of remimazolam besylate for patients with mechanical ventilation: A meta-analysis of randomized controlled trials

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ADMINISTRATIVE INFORMATION

Support - None.

Review Stage at time of this submission - Data analysis.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 07 July 2023 and was last updated on 07 July 2023.

INTRODUCTION

Review question / Objective We aimed to perform a systemic review and meta-analysis to investigate the efficacy and safety of remimazolam in this patient population.

Condition being studied The authors of the current study come from a tertiary hospital in China, and all the members have extensive experience treating patients with mechanical ventilation. Furthermore, these authors have published several meta-analyses, which can guarantee the completion of the current study.

METHODS

Participant or population Adult (≥18 years old) patients with mechanical ventilation.

Intervention Administration of remimazolam.

Comparator Any other sedations, such as midazolam, dexmedetomidine, and propofol.

Study designs to be included Randomized controlled study design.

Eligibility criteria RCT focusing on mechanically ventilated patients who received remimazolam compared to the other sedatives.

Information sources We will search the references in the included studies and personal files. We will request advice from experts in the field. Additionally, we will search associated articles from critical care, surgical, infection meetings; and contacted the authors of included trials, if need.

Main outcome(s) The outcomes were the efficacy and safety of remimazolam.

Data management The Cochrane risk of bias tool will be adopted to assess the risk of bias for each RCT.

Quality assessment / Risk of bias analysis The Cochrane risk of bias tool will be adopted to assess the risk of bias for each RCT.

Strategy of data synthesis An overall effect estimate for all data as a risk ratio (RR) / mean difference (MD) with 95% CI will be calculated. The presence of statistical heterogeneity among the studies by using the Q statistics and the heterogeneity by using the I2 statistic was addressed.

Subgroup analysis None.

Sensitivity analysis None.

Country(ies) involved China.

Keywords remimazolam, mechanical ventilation, sedative, meta-analysis, critical illness.

Contributions of each author
Author 1 - Ting Yang.
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