INPLASY PROTOCOL

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None declared.

The impact of Sofosbuvir/Velpatasvir/Voxilaprevir treatment on serum hyperglycemia in HCV infections: A Systematic Review

Hung, HY[1]; Chen, CY[2].

Review question / Objective: **To assess the possible cause of events, the incidence of grade 3 hyperglycemia after treating Sofosbuvir/Velpatasvir/Voxilaprevir in HCV infections.**
Condition being studied: **The search was no restricted to English language articles and published, that filtered randomized controlled trials (RCT) and human subjects. Included articles were screened by following criteria: the safety outcomes recorded consisted of Grade 3 level serum glucose parameters after SOF/VEL/VOX treatment for HCV infection.**
Information sources: **Extracted from Pubmed, Cochrane, clinically, EMBASE, and MEDLINE electronic databases.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 24 December 2021 and was last updated on 24 December 2021 (registration number INPLASY2021120109).

INTRODUCTION

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glucose parameters after SOF/VEL/VOX treatment for HCV infection.

METHODS

Participant or population: Hepatitis C patients.

Intervention: SOF/VEL/VOX treatment.

Comparator: Other DAA treatment.

Study designs to be included: Only randomized controlled trials (RCT).

Eligibility criteria: Included articles were screened by following criteria: described the SVR12 and relapse states after SOF/VEL/VOX treatment for HCV infection; next, the safety outcomes recorded consisted of Grade 3 level serum glucose parameters, and other grade 3 laboratory abnormalities adverse events.

Information sources: Extracted from Pubmed, Cochrane, clinically, EMBASE, and MEDLINE electronic databases.

Main outcome(s): Five RCTs were included in this systemic review. Overall, the safety outcomes revealed grade 3 level hyperglycemia occurred from zero to 7.27%, rise to 15-25% of HCV GT3 infections, especially.

Quality assessment / Risk of bias analysis: This systematic review was performed according to the PRISMA statement guidelines and used the Cochrane Risk of Bias Tool for randomized trials (rob 2.0)8 to determine the quality of each included study. There were two independent reviewers (VA and VB) evaluated the quality of the methodology, and third reviewer (VV) resolved the situation of discrepancy between the first two.

Strategy of data synthesis: Applying search strategy of Boolean Logic and search terms which was not restricted language or publication year and was conducted from inception of the database lasts until to 12 Oct 2021. The search was no restricted to English language articles and published, that filtered randomized controlled trials (RCT) and human subjects.

Subgroup analysis: This systematic review has no subgroup analysis.

Sensitivity analysis: This systematic review has no sensitivity analysis.

Country(ies) involved: Taiwan.

Keywords: Hyperglycemia; SOF/VEL/VOX; Hepatitis C; Diabetes.

Contributions of each author:
Author 1 - Hsuan-Yu Hung had contributions to the conception, design of research, the acquisition, analysis, and interpretation of data for the study.
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