INPLASY

INPLASY202460120

doi: 10.37766/inplasy2024.6.0120

Received: 29 June 2024

Published: 29 June 2024

Incidence of clinical outcomes in patients with hepatitis C cured by direct-acting antiviral drugs: a systematic review and meta-analysis

Li, HL; Gu, YY; Sheng, YJ.

Corresponding author:
Yunjian Sheng

sheng200410@163.com

Author Affiliation:
Department of Infectious Diseases, The Affiliated Hospital of Southwest Medical University.

ADMINISTRATIVE INFORMATION

Support - No funds, grants, or other support was received.

Review Stage at time of this submission - Formal screening of search results against eligibility criteria.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202460120

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 29 June 2024 and was last updated on 02 September 2024.

INTRODUCTION

Review question / Objective The aim of this meta-analysis was to estimate the incidence of clinical outcomes (including decompensated cirrhosis, occurrence and recurrence of HCC, and liver-related deaths) in HCV patients cured by direct-acting antivirals.

Condition being studied Elimination of hepatitis C virus (HCV) does not completely prevent the progression of liver lesions and relevant clinical outcomes. The aim of this meta-analysis is to increase our knowledge of the incidence of clinical outcomes after obtaining SVR with DAA in patients with hepatitis C, and to provide a high level of evidence-based medical evidence for the treatment of hepatitis C and the follow-up after hepatitis C cured.

METHODS

Participant or population HCV patients who achieved SVR with DAA therapy.

Intervention DAA therapy.

Comparator No comparator.

Study designs to be included Prospective or retrospective cohort studies, clinical trials.

Eligibility criteria Studies were included that were able to provide or calculate the incidence of outcomes in patients with hepatitis C who achieved SVR after DAA treatment. The exclusion criteria are as follows: 1. Studies in which SVR was not obtained or SVR status was unknown were excluded. 2. Studies not treated with DAA were excluded. 3. Studies in which the incidence of

outcome was not available or could not be calculated were excluded.

Information sources PubMed,EMBASE, the Cochrane Library, Web of Science.

Main outcome(s) Incidence of clinical outcomes (liver decompensation, occurrence and recurrence of HCC, and liver-related deaths) following sustained virological response in hepatitis C patients treated with DAA.

Quality assessment / Risk of bias analysis We used the Newcastle-Ottawa Quality Assessment scale to assess the study quality of articles.

Strategy of data synthesis We used random effects model with a 95% confidence interval (CI) to obtain a pooled estimate of clinical outcomes incidence. We used the I2 statistic to measure inter-study heterogeneity, i2 ≥50% indicating substantial heterogeneity.

Subgroup analysis We performed subgroup analyses according to fibrosis grade, presence of decompensation, previous HCC treatment regimen, study design (prospective or retrospective), study setting, duration of study follow-up, HBV or HIV co-infection.

Sensitivity analysis Not involved.

Language restriction English.

Country(ies) involved China (Department of Infectious Diseases, The Affiliated Hospital of Southwest Medical University).

Keywords chronic hepatitis C, direct-acting antiviral agents, meta-analysis; clinical outcomes.

Contributions of each author

Author 1 - Hualing Li.
Email: 1341108903@qq.com
Author 2 - Yuyi Gu.
Author 3 - Yunjian Sheng.